

skin diver



FOREMOST AUTHORITY IN ITS FIELD

DECEMBER 1985

\$2.50

EXCLUSIVE STORY ON THE TITANIC

Can (Or Should) She
Be Raised?

N. Carolina Dive Guide

Treasured Artifacts
Of The Andrea Doria

The Mercedes I
Classic Wreck Dive

RESORT REPORTS:

Cozumel • St. Thomas

Grand Cayman • St.

Lucia • Chub Cay

Australia



SHIPWRECK ISSUE

CHRISTMAS CASH FROM TEKNA®

This holiday season, surprise that special diver with a quality gift from TEKNA—at a very special price. From November 1 through December 31, your participating TEKNA Dealer is offering substantial savings on these fine products: \$20 OFF on the Navy Approved T-2100BX Regulator, \$20 OFF on the T-3100X Digital Dive Timer,TM \$20 OFF on all TEKNA Combo Gauges with Digital Diver Timer, \$10 OFF on matched sets of MASK 1 or MASK 3 with Self-Draining Snorkels and \$5 OFF our brilliant, Xenon powered TEKNA-LITE 4 and TEKNA-LITE 8 Non-Rechargeable Lights. It's an event that occurs only once a year, so catch it on the Yule Tide—coming in now at your TEKNA Dealer.



Offer good at participating TEKNA Dealers Nationwide
from Nov. 1 through Dec. 31, 1985.

TEKNA®

1075 OLD COUNTY ROAD • BELMONT, CA 94002 • (415) 592-4070

COPYRIGHT TEKNA 1985
circle # 101 on Reader Service Card

A new look in dive watches. An advanced design. Heuer 3000.

Heuer 3000 dive watches.
Water resistant down to 660 feet (200 m).
Turning bezel with projecting
studs for highest grip.
Flat quartz movement. Date.
Steel bracelet or leather strap
(waterproofed). Available in
several styles. Swiss made.
International guarantee
in over 110 countries.



Eastern U.S.A.:
Heuer Time & Electronics Corp.
960 South Springfield Avenue
Springfield, NJ 07081
(201) 467-1890.

Western U.S.A.:
Heuer Time & Electronics Corp.
1900 Avenue of the Stars
Century City, CA 90067
(213) 556-8208.

In Hawaii:
Timeless Reflections, Inc.
1314 So. King St., Suite 702
Honolulu, Hawaii 96814
(808) 523-8105.

In Canada:
Chronometric Co., Ltd.
Ontario, Canada.

say "Hoy-er"



since 1860 swiss

circle # 102 on Reader Service Card

Official Timekeeper of the Offshore Racing Commission
American Powerboat Association

Heuer Time & Electronics Corp.
960 So Springfield Ave., Springfield,
NJ 07081, (201) 467-1890.
West Coast: 1900 Ave. of the Stars,
Century City, CA 90067.
(213) 556-8208.

**The time
for action**

THE wenoka® Z-LOCK™ KNIFE SYSTEM

A LEGEND IN ITS OWN TIME

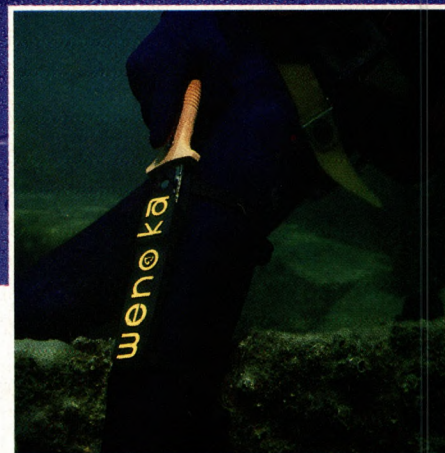


SHOWN—3 OF OUR 60 KNIVES
DESIGNED
BY DIVERS FOR DIVING!

Full Size Pro-Z-LOCK™

OTHER FINE PRODUCTS MADE BY WENOKA SEASTYLE ARE:

- MASKS & SNORKELS
- WET SUITS
- BOOTS
- GLOVES
- DIVE-PACS
- LIGHTS



INNOVATION, DESIGN AND FUNCTION

See the complete line of Wenoka SEA STYLE
dive products at your favorite pro dive shop
While there ask for your FREE Full-Color
Diving Products Guide or send \$4.00 to Wenoka



wenoka®
SEA STYLE™

1134 53rd COURT NORTH/P. O. BOX 8238 WEST PALM BEACH, FL 33407/TELEPHONE: (305) 845-6155
RESEARCH / DESIGN / ENGINEERING / QUALITY

CONTENTS

Volume Thirty-four Number Twelve

LOCAL DIVING	25	DIVING INTO HISTORY /BILL BARADA Florida river is storehouse of fossils and artifacts				
	67	NORTH CAROLINA /ROD FARB Graveyard of the Atlantic				
GAME DIVING	26	MUSSEL MADNESS /HERB SEGARS Easy to collect, cook and eat				
PHOTOGRAPHY	28	3M COLORSLIDE 400 FILM /JIM AND CATHY CHURCH				
	54	NIKONOS 15MM LENS /GERI MURPHY				
WRECK DIVING	30	TREASURE FROM THE ANDREA DORIA /BILL GLEASON Famous wreck yields mementos				
	50	THE TITANIC /ELLSWORTH BOYD Shipwreck find of the century				
	86	MERCEDES I /GERI MURPHY Ft. Lauderdale's pride of the wreck fleet				
	104	R. P. RESOR /STEVE GATTO WW II tanker offers something around every corner				
DIVE EQUIPMENT	32	BEUCHAT FINS /BONNIE J. CARDONE				
	49	OCEANIC FREEDOM 1 BC /JIM WALKER				
	126	GSD S-300 REGULATOR /ERIC HANAUER				
PERSONALITIES	40	JULIA CHILD GOES TO SEA /HILLARY HAUSER Tasting fresh-caught sea urchins in Santa Barbara				
FOREIGN TRAVEL	56	DIVING NEWS FROM DOWN UNDER /GERI MURPHY Day trips to the Great Barrier Reef				
	57	COZUMEL /STEVE LUCAS Land of scuba, sand and siesta				
	73	SUNSET HOUSE /JIM AND CATHY CHURCH In the heart of Grand Cayman				
	76	REGENCY YACHT CHARTERS /STEPHEN FRINK Power/sail cruises in the Virgin Islands				
	80	THE DIVERS' EXPRESS /GERI MURPHY Special non-stop jet flights to Cayman				
	82	CHUB CAY /STEPHEN FRINK Bahamas hideaway for fish lovers				
	90	ANSE CHASTANET /BARBARA CURRIE St. Lucia refuge for romantics				
DIVE TECHNIQUES	120	UNDERWATER CAVE RESCUE /C. RANDALL BOHRER New techniques examined				
COLUMNS	12	WRECK FACTS	14	DIVING MEDICINE	18	TECHNIFACTS
DEPARTMENTS	4	CALENDAR	9 16	SCUBA QUIZ INDEX	128	DIVER'S DIRECTORY

COVER

Colin Tozer, divemaster at the Tiara Beach Hotel on Cayman Brac, rides a large Caribbean turtle. For more information on Cayman, see our articles on *Sunset House* (pg. 73) and *The Divers' Express* (pg. 80). Photo/Geri Murphy.

Diver's Calendar

DIVE TO ADVENTURE

Jack McKenney has added another film to those available for presentation under his Dive to Adventure program—bringing the total to 24 films and slide series. The latest film, entitled *The Underwater World of Jean-Jacques Dubois*:



Part I: Learning How to Dive, features a group of diving "crazies" who poke fun at themselves and the scuba diving industry in general.

Dive stores, clubs, councils and colleges have sponsored Dive to Adventure presentations to promote diving, to raise money for charity or for profit. For information contact: Jack McKenney, P.O. Box 6365, Glendale, California 91205-0365; (213) 663-3486. ✻

CA WRECK DIVERS BANQUET

The California Wreck Divers' annual banquet will be held on the *Princess Louise*, San Pedro, California, January 11. The master of ceremonies will be Duncan Mathewson, chief archaeologist for treasure hunter Mel Fisher. Mathewson will present a program on the *Atocha* discovery and salvage.

For information contact Bill Wilson (213) 306-7822 or David Lee (818) 576-8293. ✻

BOSTON SEA ROVERS CLINIC

Boston Sea Rovers '86, the 32nd annual underwater clinic, will be held in Boston on March 8. The daytime program, featuring exhibits and seminars on all aspects of diving, will occur 9:30 am—4:00 pm at the Copley Plaza. The nighttime program, 8:00—11:00 pm will be held at John Hancock Hall. Films by Joe MacInnis, Stan Waterman and Bob Ballard will be shown, followed by a meet the speaker party.

For information contact: Boston Sea Rovers, P.O. Box 717, Westwood, Massachusetts 02090 or Bunky Hodge (617) 878-8710. ✻

SKIN DIVER Magazine, (ISSN 0037-6345) © Copyright 1985 by PETERSEN PUBLISHING COMPANY. All rights reserved. Published monthly by Petersen Publishing Company, 8490 Sunset Blvd., Los Angeles, California 90069. Second Class postage paid at Los Angeles, CA and at additional mailing offices. Single copy \$2.50. Subscription inquiries phone (213) 854-2470. Subscription rates: U.S. Possessions one year \$13.94. All other countries one year \$21.94. CONTRIBUTIONS: Should be mailed to 8490 Sunset Blvd., Los Angeles, California 90069. They must be accompanied by return postage and we assume no responsibility for loss or damage thereto. Any material accepted is subject to such revision as is necessary in our sole discretion to meet the requirements of this publication. Upon acceptance, payment will be made at our current rate, which covers the author's and/or contributors right, title and interest in and to the material mailed including but not limited to photos, drawings, charts, and designs, which shall be considered as text. The act of mailing a manuscript and/or material shall constitute an express warranty by the contributor that the material is original and in no way an infringement upon the rights of others. CHANGE OF ADDRESS: Six weeks notice is required to change a subscriber's address. Please give both old and new address and label. Mail to P.O. Box 3295, Los Angeles, CA 90078. POSTMASTER: Send address change to Skin Diver Magazine, P.O. Box 3295, Los Angeles, California 90078.

WRECK DAY

The second annual Wreck Day will be held at the Marine Museum at Fall River, Massachusetts on December 7. The event will include presentations on wreck preservation, research and legislation, as well as a U/W video on the *SS Republic*.

For information contact: Bob Cembrola (617) 674-3533. ✻

BOSTON ACTIVITIES

Three important events will be held March 1 in Boston, Massachusetts:

The Boston Diving Show will be held at the Park Plaza Hotel, 11:00 am to 5:00 pm. The event will include daytime seminars and equipment exhibits. Tickets are \$7 by mail.

The Underwater Film Review will be held at John Hancock Hall at 8:00 pm. Jack McKenney's Dive to Adventure program will be featured. Tickets are \$7 when ordered by mail.

Professional Scuba Inspection's Visual Cylinder Inspector (VCI) training course, featuring Bill High, will also be held at the Park Plaza Hotel.

For information or tickets to these events contact: Fred Calhoun, P.O. Box 291, Back Bay Annex, Boston, Massachusetts 02117. ✻

BENEATH THE SEA

Beneath the Sea, the greater New York underwater film festival and exposition, will be held March 21-22 at the Marriott Hotel, Tarrytown, New York. Stan Waterman will be the master of ceremonies. The event will feature film, slide and video presentations; exhibits of world travel, scuba equipment, certification agencies, dive clubs and more. It is sponsored by the Scuba Sport Rites Club and the Underwater Society of America.

For information contact: Armand Ziegahn (914) 684-4971. ✻

SEASPACE '86

Seaspace '86, a program of exhibits, seminars and films, will be held June 6-8 at the Shamrock-Hilton Hotel in Houston, Texas. For information, contest applications and tickets, contact: Seaspace '86, P.O. Box 3753, Houston, Texas 77252-3753. ✻

STAFF

PAUL TZIMOULIS / V.P. Group Publisher, Photography/Marine Division
BILL GLEASON / Editor-Publisher
CONNIE JOHNSON / Managing Editor
ART SMITH / Art Director
BONNIE J. CARDONE / Executive Editor
LESLIE BARROWS / Asst. Art Director
JIM WALKER / Associate Editor
JIM R. WARNER / Ad Service Coordinator
RANDALL RAY / Ad Service Coordinator
REBECCA L. THOMAS / Sr. Editorial Asst.
STEPHEN C. LIPIRA / Data Processor
RAMONA AGUIRRE / Publisher's Secretary

CONTRIBUTING EDITORS

BILL BARADA / Environmental Editor
HILLARY HAUSER / Special Features Editor
JIM & CATHY CHURCH / Photography Editors
JACK MCKENNEY / Adventure Editor
E.R. CROSS / Technical Editor
GERI MURPHY / Special Assignments Editor
ELLSWORTH BOYD / East Coast Editor
GEORGE COZENS / Technical Editor
ALFRED A. BOVE, M.D. / Medical Consultant

ADVERTISING SALES

MARIO VALENZUELA / Los Angeles
DIANNE CURTIS / Los Angeles
DAN DORAN / Los Angeles
JOHN RUOFF / Atlanta
CAROLINE GANNON / Atlanta
CANDI ALLISON / Atlanta
BRENT O'BRIEN / Atlanta
EDWARD MONK / New York
CAROLYN PASCAL / New York
SANDRA GONZALEZ-CHURCH / Chicago
KARIN BROCKMAN / Chicago

PETERSEN PUBLISHING COMPANY

R.E. PETERSEN / Chairman of the Board
F.R. WAINGROW / President
ROBERT E. BROWN / Sr. V.P. Corporate Development
PETER F. GLANCEY / Sr. V.P. Nat'l. Advertising Director
JOHN DIANNA / V.P. Group Publisher, Automotive Performance Group
THOMAS J. SIATOS / V.P. Group Publisher
PAUL TZIMOULIS / V.P. Group Publisher, Photography/Marine Division
ROBERT MACLEOD / V.P. Publisher
MILES KILLOCH / V.P. Publisher
PHILIP E. TRIMBACH / V.P. Financial Administration
JAMES J. KRENEK / V.P. Manufacturing
NIGEL P. HEATON / V.P. Circ. Mkt. Development
LEE KELLEY / V.P. Publisher, Automotive Specialty Publications
LEO D. LA REW / Treasurer/Assistant Secretary
MARIA COX / Director, Data Processing
BOB D'OLIVIO / Director, Photography
AL ISAACS / Director, Corporate Art
CAROL JOHNSON / Director, Advertising Administration
DON MCGILGATHERY / Director, Advertising Research
VERN BALL / Director, Fulfillment Services
HENSON LACON / Director, Subscription Sales

ADVERTISING OFFICES

LOS ANGELES
 Ralph Panico, Western Advertising Director
 8300 Santa Monica Blvd., Third Floor
 Los Angeles, CA 90069
 Phone (213) 854-2222
NEW YORK
 Charles E. Alexander
 Eastern Advertising Director
 Anthony Coelho
 Branch Manager
 437 Madison Avenue, 28th Floor
 New York, NY 10022
 Phone (212) 935-9150
DETROIT
 Steve Flemion
 Branch Manager
 333 W. Fort St. Building, Suite 1800
 Detroit, MI 48226
 Phone (313) 964-6680
CHICAGO
 Duane R. Placko
 Midwestern Advertising Director
 John Hancock Center
 875 N. Michigan Ave., Suite 3131
 Chicago, IL 60611
 Phone (312) 222-1920
CLEVELAND
 Dewey F. Patterson, Branch Mgr.
 Three Commerce Park Square, Suite 605
 23200 Chagrin Blvd.
 Cleveland, OH 44122
 Phone (216) 464-1522
ATLANTA
 Richard E. Holcomb, Branch Mgr.
 Four Piedmont Center, Suite 601
 Atlanta, GA 30305
 Phone (404) 231-4004
DALLAS
 Jeff Young, Branch Mgr.
 800 W. Airport Fwy, Suite 201
 Irving, TX 75062
 Phone (214) 579-0454

PETERSEN MAGAZINE NETWORK

Ralph Panico/Western Advertising Director, Los Angeles
 Charles C. Alexander/Eastern Advertising Director, New York
 Duane R. Placko/Midwestern Advertising Director
 Steve Flemion/Detroit Branch Manager
 Dewey F. Patterson/Cleveland Branch Manager
 Richard E. Holcomb/Atlanta Branch Manager
 Jeff Young/Dallas Branch Manager
 Anthony Coelho/New York Branch Manager

If there's one piece of equipment you should be able to take for granted during a dive, it's your regulator.

That's why more seasoned divers recommend the Mares MR12-III.

Our second-stage design incorporates a by-pass tube that assists the



flow of air, allowing you to breathe under water almost as smoothly and effortlessly as you do on land. Even at greater depths or under demand-

ing conditions.

It's a system so unique, it's patented.

And one you can depend on for precise, unerring, trouble-free performance, dive after dive.

Year after year, too, because this regulator is made of environmentally-

resistant materials designed to last.

And if you're into cold-water diving, you can get MR12-III quality in our new, pre-assembled Environmental First Stage.

It's no surprise that the MR-12 series has been the choice of sport, profes-

sional and military divers for over two decades.



In fact, they think so highly of us, they don't give us a second thought.

For SeaQuest/Mares full color catalog send \$2.00.

SeaQuest, Inc. 2151-F Las Palmas Drive, Carlsbad, CA 92008, (619) 438-1101.

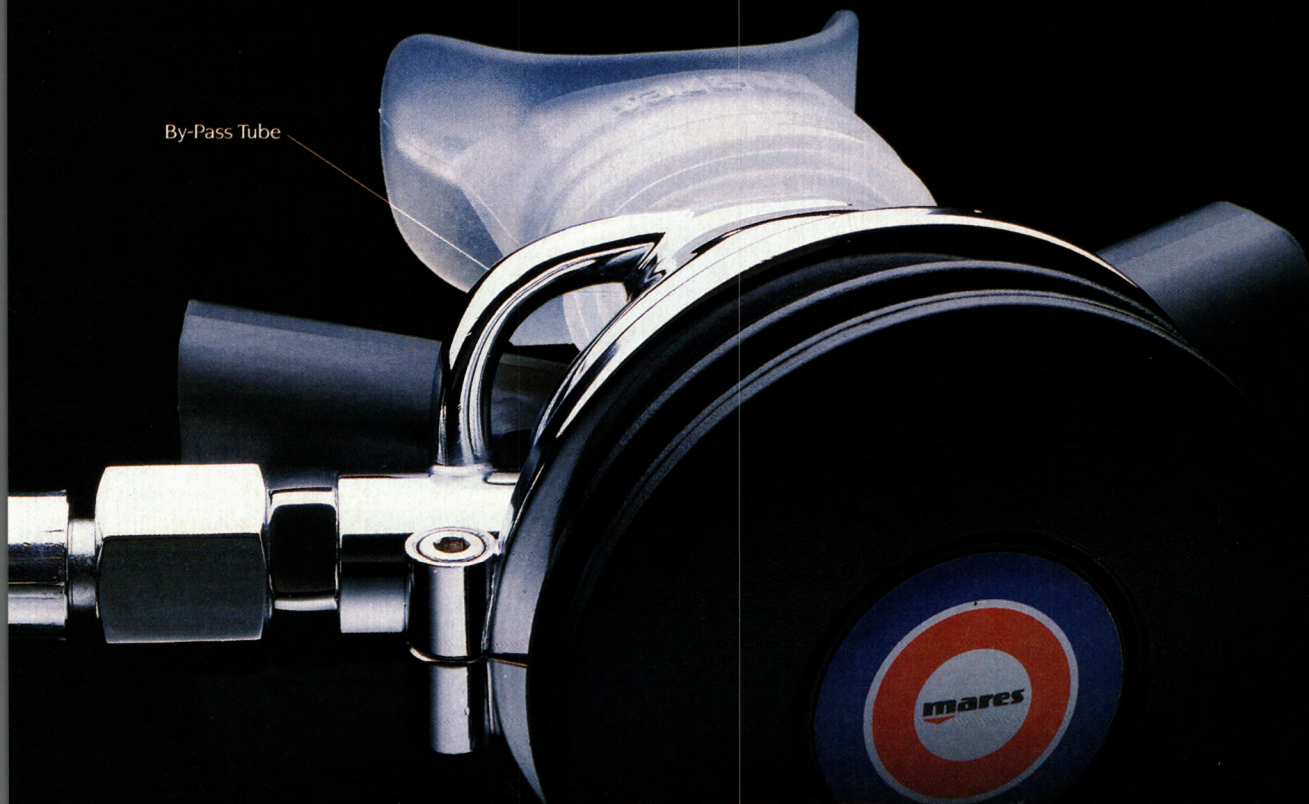


Mares

Gear for Adventure.

Being forgettable has made us #1.

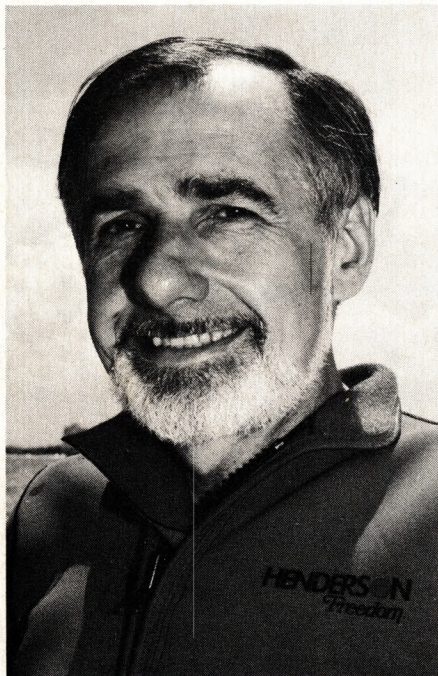
By-Pass Tube



The MR12 III.

SDM Editorial

BY THE PUBLISHER



U/W, DRUGS ARE A NO-NO

It is a popular misconception among drug users that marijuana is one of the "soft drugs"—not habit forming, quite controllable, relatively harmless and probably less injurious than drinking alcohol. This is not the case as far as diving is concerned. Instead of discovering the much sought-after "beautiful trip," the stoned diver encounters disappointment, misery and has a better-than-average chance of drowning.

A scuba instructor in Europe reported some unusually revealing facts about a series of experiments conducted by him and a group of friends. Under close observation, dives were made from 10 to 30 feet deep in 54°F water, using quarter-inch wetsuits. After smoking just one marijuana cigarette, every diver experienced intense, intolerable cold that eventually drove him/her out of the water in a fraction of his/her normal exposure time. In most instances the divers could endure barely 10 minutes U/W when normally they felt comfortable for an hour or more.

A reduction in breathholding capability was also quite, noticeable. The instructor involved was an experienced free diver who could normally hold his breath for two and one-half to three minutes, but the effects of marijuana reduced this to a maximum of 30 seconds. He felt like a weak, out-of-shape beginner.

Perhaps the most dangerous effect of the marijuana was on the divers' minds and imaginations. All involved reported feeling great discomfort and irritation while underwater as well as an overwhelming urge to terminate their dives. Sudden movements of kelp with surge would induce near panic and a peculiar sense of unexplainable apprehension became a constant companion. They remained jittery throughout the dives.

The instructor involved in the experiment provided an interesting insight into the diver's subconscious workings. Throughout his marijuana dive, he could not dismiss a recurring thought about a shark attack that had happened seven years prior in an area approximately three miles away. He simply couldn't shake the thought of this incident even though he had not seen a shark during six years of repeated diving on this site. The instructor had never before been concerned about sharks and had en-

countered them several times while diving in other parts of the world. Yet, while under the influence of marijuana, his concern built up to the brink of paranoia.

From this firsthand report it becomes obvious that marijuana is anything but a safe drug. It can amplify many of the unpleasant underwater stimuli a diver trains so hard to overcome. Small things such as cold water; water up the nostrils; the urge to breathe; surge; and water in the eyes can develop into insurmountable problems for the drugged diver. Minus rational thinking and physical stamina, the diver is an easy mark for panic. It is also quite apparent the use of drugs while diving tends to release or reveal many of the diver's basic (and normal) fears that have been suppressed and buried deep in the subconscious. Marijuana could very well be the key that unlocks the door to your "monster closet."

We've received another report (this one second hand) about a group of divers experimenting with marijuana in waters off Okinawa Island. The experiments were conducted several years ago and involved three or four divers who took turns observing the effects on one another. According to their reports, the effect was entirely different. In warm water the drug user becomes ultra-relaxed, sleepy, unaware, lazy and the ability to think or do work is reduced to nearly zero. They described this phenomenon as a "gray-out"—aware of things happening around you but unable to do anything about them. Upon reaching a depth of between 50 to 60 feet every one of the divers (at different times) became unconscious. They reported the experience as sort of simply going to sleep. Needless to say, these divers have ceased experimenting and warned all of their friends to do the same.

We recognize the effects of marijuana are bound to vary from one individual to another and may be dependent on the strength or quality of the drug. However, the general effect is the same: Euphoria U/W does not await the drug user.

The myth of marijuana underwater has been exposed by those very users who were eager to experience the super trip. Don't experiment—it's been done and the results are disappointing. Don't try that first trip—it may be your last. 

“What would happen if a diver took drugs and then went underwater?” This question is typical of the inquiries received from some of our newer readers. Many instructors categorically condemn all drug usage while diving. Most experienced divers just naturally assume the effects of drugs underwater would be extremely dangerous.

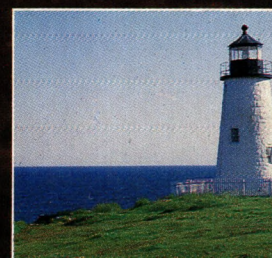
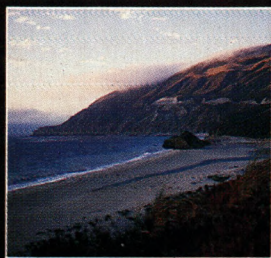
But theory may not be a good enough answer. Exactly what does happen to a diver on drugs? Unfortunately, there is not much information published on the effects of drugs underwater, leaving authorities without valid answers.

Recognizing the fallacy of an arbitrary “no,” SKIN DIVER began its own investigation on the subject—compiling data from private interviews, confidential reports and tracking down rumors that have circulated among the ranks of scuba instructors. What we stumbled upon turned out to be frightening and we can now state absolutely, undeniably and emphatically—drugs and diving don't mix.

Although most drug users are reluctant to discuss their “trips” for fear of legal prosecution, the people we have come in contact with felt compelled to report their experiences in hopes of warning others of the serious dangers involved. Here is what we found:



SHOW US THERE'S NO PLACE LIKE HOME AND WE'LL SHOW YOU THE REST OF THE USA.



Enter the "Show Us Your Hometown on Fujichrome" Contest and win a trip for two anywhere in the continental USA on Amtrak.

Simply send us your best slide of your hometown on Fujichrome, the slide film that offers sharper pictures and truer colors. The grand prize includes 1st class train travel, hotel accommodations and Fuji's top of the line SLR camera, the AX-MP. Other prizes include cruises, cash and cameras.

Send us your hometown. If we love it, we'll help you leave it.

Grand Prize: Plan your own

Amtrak trip up to 3 weeks, to anywhere in the continental USA.



It includes 1st class private room accommodations for two.

Also, you get 3 days/2 nights at Sheraton Hotels two times along the way. Plus a Fuji AX-MP camera for terrific photographs and \$1,000 in spending money.

Two First Prizes: Seven day M-V Regent Sea* cruise for two with deluxe accommodations and meals to either the Caribbean or

Alaska, plus transportation to/from port of departure and \$200.00 in spending money.

Six Second Prizes: You plan a five day excursion, via 1st class private room for two on Amtrak, plus 2 days/1 night at a Sheraton Hotel and \$500.00 in spending money.

Twenty Third Prizes: Fuji DL-50 cameras, the easiest way to take great pictures.



**FUJI FILM.
GET THE TRUE PICTURE.**

© 1985 FUJI PHOTO FILM, USA, 350 FIFTH AVENUE, NY, NY 10118
*Ship Registry: Panama

RULES AND REGULATIONS

1. To enter, include one slide with an official entry form or facsimile thereof. Mark slide with your name and mail to: "Show Us Your Hometown on Fujichrome" Contest, P.O. Box 1154, Grand Rapids, MN 55744 2. Only one entry per person. 3. All entries must be on Fujichrome film. 4. All entries must be postmarked by July 31, 1986. Winners will be notified by mail by September 30, 1986. 5. If you wish to have your slide returned please include a self-addressed stamped envelope. 6. All winning slides become the property of Fuji Photo Film, USA, Inc. Winners must obtain a signed model release from all recognizable individuals in the photographs as determined by Fuji Photo Film. 7. Con-



test not open to employees of Fuji Photo Film, their advertising and promotion agencies. 8. Amtrak trip must be taken between October 1986-April 1987. Trips cannot be taken during major holidays. Sheraton accommodations and Amtrak travel subject to availability. 9. Approximate prize values—Grand Prize: \$8,000, First Prizes: \$3,700 each, Second Prizes: \$1,500 each, Third Prizes: \$160 each. 10. Judging will be done by an independent panel of judges. 11. Taxes on prizes are the responsibility of winners. 12. Not responsible for lost, misdirected, stolen, late mail or slides. 13. Void where prohibited or restricted by law.

OFFICIAL ENTRY FORM

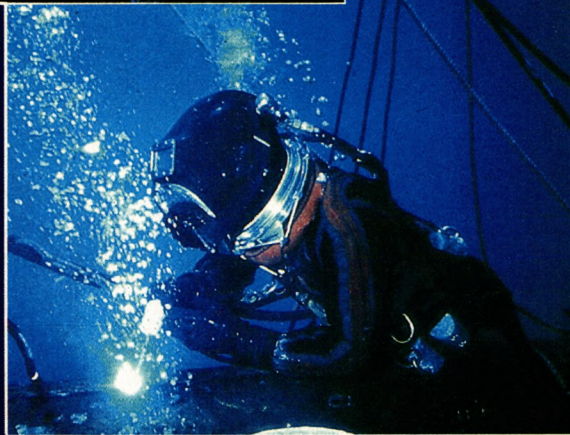
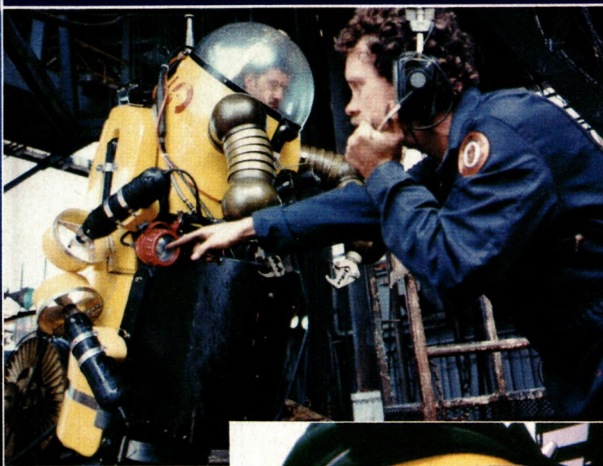
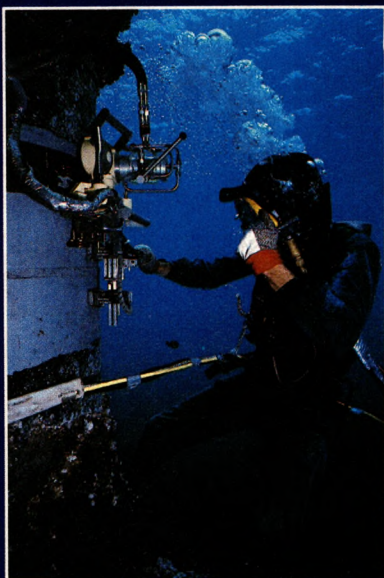
Name _____

Address _____

City _____ State _____

Zip _____ Phone () _____

IT PAYS TO BE TRAINED AT THE *ONLY* SCHOOL FOUNDED BY THE WORLD LEADER IN UNDERWATER DIVING SERVICES



To ensure a continuing supply of highly-trained divers, Oceaneering International Inc., the world's largest contractor employing more than 2,600 men and women in the diving industry located in 24 countries, founded the College of Oceaneering • the *ONLY* school with a world-wide communications network to contractors for employment placement • the *ONLY* school offering a free lifetime job referral service to graduates • the *ONLY* school offering a 30-day full tuition refund guarantee to new students • the *ONLY* vocational diving school awarding Associate in Applied Science degree • the *ONLY* school training divers in atmospheric diving suits • the *ONLY* school with a completely operational bell/saturation system in open water • the *ONLY* school offering training with the most unique state-of-the-art equipment • the *ONLY* school you should select if you're seriously interested in a commercial diving career.

**ASK ABOUT OUR NEW CURRICULUM, AND THE
LOWEST PRICED CERTIFICATED AIR DIVING COURSE
IN THE NATION. JOIN THE PROFESSIONALS!**



College of Oceaneering
Los Angeles Harbor, 272 S. Fries Ave.
Wilmington, CA 90744-6399 (213) 834-2501

**CALL TOLL FREE FOR MORE
INFORMATION 1-800/824-9027**

circle # on reader service card

circle #103 on Reader Service Card

TUITION BEGINS AT \$1,500

Scuba Quiz

Category: Multi-level Diving

By Dennis Graver

Interest in multi-level diving has been keen for a number of years. The procedure can allow a diver to spend time at multiple depths during a single dive and not have to consider the total time as being spent at the deepest depth. Where did this procedure originate? What are the current recommendations concerning its use? See what you know about multi-level diving. The answers are on the following page.

1. Multi-level diving was first developed and is currently used by:

- ☐ A. The U.S. Navy
- ☐ B. Commercial diving companies
- ☐ C. Diver training agencies
- ☐ D. None of the above

2. A dive table procedure for multi-level diving was first introduced to the recreational diving community in:

- ☐ A. 1957
- ☐ B. 1972
- ☐ C. 1976
- ☐ D. 1979

3. The procedure for determining bottom time for multi-level dives involves:

- ☐ A. Figuring a change in depth as a repetitive dive
- ☐ B. Determining an equivalent bottom time at a shallower depth for the time spent at a deeper depth
- ☐ C. The use of the average depth for a dive
- ☐ D. A or B but not C

4. The procedures for multi-level diving are currently included in the instruction of:

- ☐ A. The U.S. Navy
- ☐ B. Only one diver training agency
- ☐ C. Some commercial diving schools
- ☐ D. None of the above

5. Which of the following rules do not apply to multi-level diving?

- ☐ A. Keep at least one group back from the no-decompression limit for any depth
- ☐ B. Make a safety decompression stop for several minutes at 10 feet at the end of a multi-level dive
- ☐ C. Ascend at least 30 feet when changing depths
- ☐ D. The time spent at one depth should not include the ascent time to a shallower depth

6. It is currently established that multi-level diving should be done only by:

- ☐ A. Divemasters and instructors
- ☐ B. Resort dive guides for set locations
- ☐ C. Divers with a deep diving specialty rating
- ☐ D. None of the above

7. If the multi-level diving procedure is used, it is appropriate for:

- ☐ A. Single dives only
- ☐ B. Repetitive dives only
- ☐ C. Single or repetitive dives
- ☐ D. Single dives shallower than 130 feet

8. The multi-level diving procedure is considered appropriate for use for which of the following levels of certification?

- ☐ A. Advanced scuba diver
- ☐ B. Deep diving specialty
- ☐ C. Divemaster
- ☐ D. None of the above

9. With the exception of complex table calculations, there is currently no means available to allow divers to safely make multi-level dives.

- ☐ A. True
- ☐ B. False

10. Multi-level diving has been widely published primarily to:

- ☐ A. Promote its use by recreational divers
- ☐ B. Discourage its use by recreational divers
- ☐ C. Obtain information regarding the procedure
- ☐ D. Educate divers on proper procedures for its use

Scuba Quiz

Answers: Multi-level Diving

1. B. Commercial diving companies.

A number of commercial diving companies have developed and use their own dive tables and procedures. They have employed experts to devise and test procedures to meet the needs of the working diver. One such procedure is multi-level diving.

2. C. 1976. I first introduced the concept of multi-level diving with a paper at the Eighth International Conference on Underwater Education in San Diego, California. The purpose of the presentation was to request information on the feasibility of the procedure. Following my presentation, Bruce Bassett made me aware that the technique was being used by commercial divers.

3. D. A or B but not C. The bottom time may be determined by means of equivalent time, which is the amount of bottom time required to attain the same repetitive group designation at one depth as compared to another. This equivalent time is then added to the additional time spent at the shallower depth. The ascent to a shallower depth can also be figured as a repetitive dive, with the no-decompression limit for the new depth reduced by the residual nitrogen time.

4. C. Some commercial diving schools.

The procedure is included in the curriculum at some marine technology vocational schools because it is valuable in the work environment and because the activities of commercial divers can be carefully planned and controlled.

5. D. The time spent ascending to a shallower depth *should* be considered as time spent at the deeper depth. While the ascent time is usually short, it may be enough to result in a different repetitive group designation. This is an important safety factor for multi-level diving.

6. D. None of the above. Multi-level diving is an interesting concept, but established use of it exists only in commercial diving. While the theory is valid, several factors result in lack of notable endorsement for its use by recreational divers.

7. C. Single or repetitive dives.

While the procedure may be valid, my personal recommendation is that its use be limited to a single dive that is completely planned in advance. Compounding the risk by repetition of a complex procedure during one day seems inappropriate for recreational purposes.

8. D. None of the above. Multi-level dives conducted on an individual basis are probably inappropriate. It has been suggested that the technique may be feasible for use with a fixed profile in a fixed situation in resort settings. Under such circumstances, the dives would be set and controlled.

9. B. False. There is at least one decompression computer designed to continuously calculate the no decompression limits as a diver varies depths. Proper use of such a device—one that has been tested and proven—can permit multi-level dives to be made with relative safety.

10. C. Obtain information regarding the practice. Various articles on multi-level diving have requested information on its use, posed questions about it and left them unanswered and identified the need for testing and research. The interest in the subject is high because it meets a real need, but the practice does not have adequate support to be recommended for general use.

I have tried, through this quiz, to educate the reader regarding a controversial topic and to clarify appropriate use of this interesting procedure. My personal observations suggest that divers are generally lacking in proficiency with dive table calculations. Based on this, I discourage multi-level dives except for controlled resort settings. The table calculations are complex, there are numerous rules to be applied and the extra dive time gained probably isn't worth the risk. If you want to make multi-level dives, I suggest use of a proven decompression computer, which will make all of the complex calculations for you.

TAKE A CLOSER LOOK AT SHERWOOD



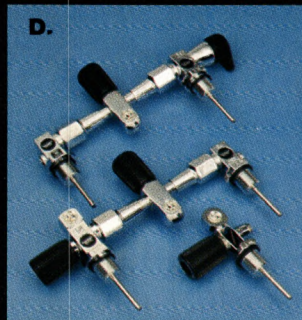
A.



B.



C.



D.



E.

A. Regulators. Sherwood regulators combine easy-breathing designs with lightweight, durable materials. Choose the popular Magnum™ regulator, or the new, low-priced BRUT™ regulator. Both are designed for maximum diving comfort, minimal maintenance. And all Sherwood regulators carry a lifetime limited warranty.

B. Snorkels. New Freedom™ snorkel features soft medium-bore tube and silicone swivel mouthpiece. New Lamina™ snorkel has same mouthpiece, unbreakable large-bore tube, plus adjustable mounting clip. Both designed for maximum comfort. Four colors available: red, blue, smoke and clear.

C. All New Pro Plus™ BC Jacket. Contoured shoulders plus adjustable side lobes. Velcro® cummerbund and quick-release chest closure for perfect fit without squeeze. Backpack with nylon tank band, mounting plate. Power inflator with integral pump-dump valve. Double-compartment, right-side "X-Pocket"™ for accessories. Sizes: M, L, XL.

D. Valves and Manifolds. Take your pick from the widest selection of single and manifold valves. You'll find the perfect match for your regulator and octopus, tank configuration and type of dive.

E. Panview™ Diving Mask. For a mask that really fits, try the new Sherwood Panview three-window mask. Attractive look, low internal volume and panoramic underwater vision. Silicone or neoprene skirt in wide choice of frame colors. Free plastic travel case included!

Now at your Sherwood Dealer!

© TM Trademarks of Sherwood Selpac Corp.

™ Velcro is a registered trademark of Velcro U.S.A. Inc.

924-041

circle # 104 on Reader Service Card

**SHERWOOD
SCUBA**

Lockport, NY 14094 U.S.A.

Wreck Facts



BY ELLSWORTH BOYD

Ron Schriar, captain of the salvage boat, *Hobbit* out of North Palm Beach County, Florida said: "The Second Annual Greater Ft. Lauderdale Shipwreck Symposium presented the most interesting program and best variety of wreck exhibits I've ever seen. The treasure displays were dazzling and inspirational."

"We needed inspiration and a larger audience," said Jeff Pollard, symposium coordinator, "and we sure got it when Mel Fisher hit the Mother Lode a little more than a week before our gathering."

"Of course it was all planned that way," Pollard smiled, "but seriously speaking, it added a large measure of excitement to the symposium and Mel's talk drew the largest audience we've had."

Eleven days before the symposium, Fisher's divers from Treasure Salvors, Inc. found one of the largest underwater caches ever recorded—what Fisher calls the "Mother Lode." Working in 50 feet of water off the Marquesas Keys, 40 miles from Key West, Florida, divers brought up 250 silver bars, 25,000 silver coins stored in eight treasure chests, silverware, copper ingots and a variety of artifacts from the *Nuestra Señora de Atocha*. Fisher's exhibit included gold and silver coins, jewelry and a golden cup from the *Atocha*, but his slide show depicted treasures and memories gleaned from 17 years of tracing the history and tracking the trove of the Spanish galleons of the 1622 and 1715 treasure fleets. He has pursued the *Atocha* for many years and this, his third strike on the elusive galleon, was by far the largest.

The symposium audience was enthralled by the man they call "the dean of treasure divers" who admitted that as a child he read all about pirates and treasures. Fisher said, "The first question peo-



Bill Raymond (left) and Jeff Pollard observe interesting items at this year's Greater Ft. Lauderdale Shipwreck Symposium. Speakers included Mel Fisher.

ple ask is, 'How much is it all worth?' But I honestly can't talk about it in terms of dollars and cents. It's one of the greatest archaeological projects we have undertaken and could be one of the biggest and best in history. Some of the treasure will eventually be donated to museums, but most of all I want people, especially children, to see it on display and be able to understand and appreciate the history behind it all."

The history was explained to the audience by archaeologist Duncan Mathewson whose best selling book about the

Atocha appeared two years ago.

"We mapped a shipwreck scatter pattern over four years ago," Mathewson said, "to track this and other wrecks spread over the coral and sand. The 550 ton vessel was broken up all over the place, but we made an initial find of ballast, gold, silver, munitions and artifacts on the southeast end of a long axis we call 'the big pile.' Later, we found nine bronze cannons that delighted us because we were beginning to prove some of our hypothesis. And, we were training divers to carry out this archaeology and formulate their own conclusions. You don't need a Ph.D. in archaeology to identify a 17th century anchor fluke from an 18th century one. Many of our divers learned through experience."

But in 1980 the *Atocha* search led Mathewson and his divers to a sister ship, the *Santa Margarita*, and all energies shifted to that site. In March 1985 they returned to the *Atocha*, another scatter pattern emerged and guns, rigging, barrel hoops and other clues were uncovered.

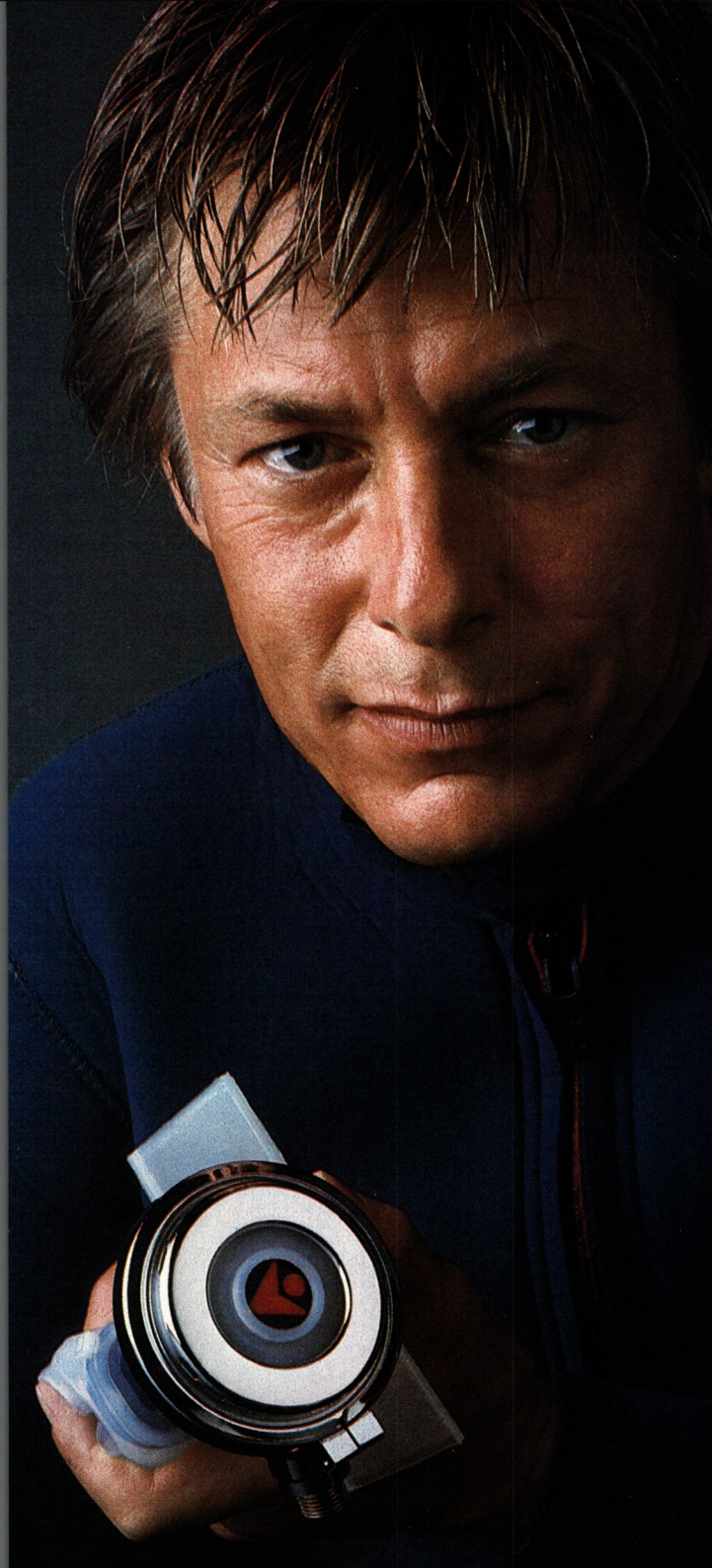
"Finally we hit the classic Mother Lode," Mathewson said as he diagrammed the site on a chalk board before a captivated audience. "We found rigging, copper sheathing and a mountain of silver bars. The site is 100 feet long and 60 feet wide. Other archaeologists, sport divers and I will be mapping, gridding, surveying and photographing the site. Then the artifacts will be preserved. In my opinion, these will be some of the most wonderful archaeological riches we will ever see."

For all treasures found, there are plenty remaining in the sea and perhaps some that are non-existent. Gary Kozak, Klein Associates, Salem, New Hampshire gave a slide presentation of his discovery of the fabled *Dean Richmond*, probably one of the most sought after shipwrecks on the Great Lakes. Lost in a raging storm in Lake Erie in 1893, the vessel was rumored to have a large shipment of gold aboard, secretly brought to the dock by a Pinkerton Agency or American Express just before the ship sailed. This was common practice in those days in order to thwart robberies.

In eight years Kozak searched over 550 square miles of water and discovered 31 virgin wrecks before he side-scanned the *Dean Richmond*, sunk upside down, 100 feet deep. Five miles off the northeastern shore of Pennsylvania, the *Dean* yielded several tons of lead and zinc ingots, the ship's compass, chinaware and bags of flour. The flour was intact but turned rancid when Kozak brought it topside. The burlap was preserved with the company's name still imprinted on it.

"The safe with the gold remains a mystery," Kozak said. "That story never came out until 10 years after the sinking and neither American Express nor the

(Continued on Page 108)



It's time to air our differences.

When you compare Tabata, it's pretty obvious that our equipment is different. We've added a splash of color. A sense of style.

But the differences go deeper. Like the innovations in our regulators that make them tougher and more reliable.

For instance, our balanced flow-through piston first stage is rated to handle up to 4000 psi. It has a 360° swivel with 4 low pressure ports. We even angled the high pressure ports, so that hoses stay out of the way.

The case and demand valve body surrounding our second stage utilizes state-of-the-art Borg Warner CTB and sonic welding, resulting in a high IZOD rating. Plus, the mouthpiece, exhaust tee, exhaust valve, purge cover and diaphragm are all made of super-resilient silicone—which is not only hypo-allergenic, but also impervious to the damaging effects of salt water and ozone.

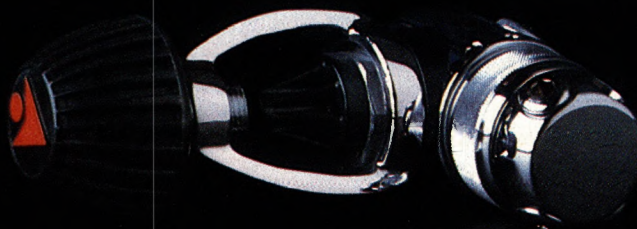
What's more, Tabata regulators are 100% American made and backed by a Lifetime Warranty.* Which can really make a difference when it comes time to service them.

Tabata. When it's a question of who makes the best regulators, there's no argument.



*See your dealer for details.

Tabata





DIVING MEDICINE

BY FRED BOVE, M.D., PH.D.

This month Chris Wachholz, the assistant director of the Divers Alert Network (DAN), discusses medical support for sport diving. DAN has succeeded in providing a line of communication for divers who need medical information and referral to a hyperbaric treatment center. The organization will, however, need your continuing support to provide this important service.

Injuries from sport scuba diving pose a unique problem for the emergency medical system (EMS). While there are relatively few injuries in a sport enjoyed by over two million people, the nature of these injuries require prompt specific care to result in a positive outcome. This article will discuss some of the problems that inhibit the care of an injured diver. Such problems are: lack of appropriate chambers available 24 hours a day; lack of personnel trained to recognize and treat diving injuries; great distances between treatment resources; expense of treatment, transport and inadequate insurance coverage; lack of recognition of symptoms by divers and health care workers; growth of the sport.

For years the conventional advice for sport scuba divers in dealing with a diving emergency has been, "go to the nearest chamber." This hand-me-down advice from the military and commercial diving industry makes sense when the nearest chamber is nearby. This is not the case for sport divers who may be hundreds of miles from the nearest chamber and possibly farther from one capable of providing help.

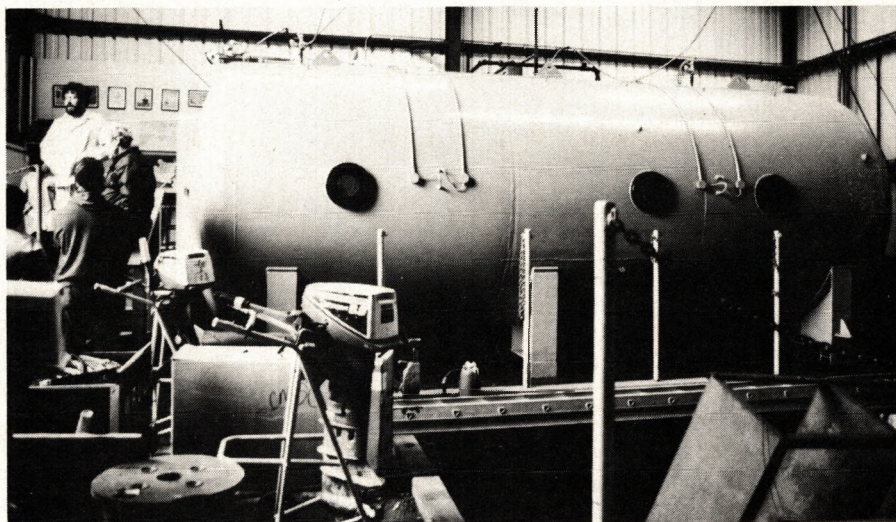
Not all chambers can or are available for providing help for all types of scuba related injuries. While there are over 200 chambers in the U.S., Canada, and Caribbean, there are only about 50 that regularly accept referrals of divers. Many of these chambers do not accept all types of diving injuries.

DAN is not so much a formal organization of chambers as it is a means of facilitating communication between divers, non-diving physicians and existing treatment resources. Consequently, a variety of chambers make up the DAN network, offering varying levels of care.

DAN prefers to send divers to hospital

based multiplace chambers, but as there are so few, DAN also relies on commercial, military, scientific and monoplace chambers. The military, commercial and scientific chambers are generally not near hospitals. They generally have little in the way of medical supplies or personnel. Frequently, a physician will not be present and may only be able to advise the tenders and operations by phone.

These chambers do the best they can but have difficulty in supporting a gravely ill patient or one requiring a saturation therapy table (which may last two or more days). Physical therapy and other supportive services generally available at major hospitals are also lacking.



Many hyperbaric chambers do not treat recreational divers or are so far from resort areas as to require specialized air transport of the victim from dive site to chamber.

A monoplace chamber has space for only one person, the patient, and is pressurized with 100 percent oxygen. These have been established in greater frequency than multiplace chambers because they are relatively inexpensive and are easy to maintain and operate.

Pressurizing with 100 percent oxygen limits the total treatment time allowed under pressure because of risk of oxygen toxicity. Because of this reason and because a chamber tender cannot accompany the patient to care for or evaluate his/her progress, many physicians believe monoplace chambers have limited use. One advantage of monoplace cham-

bers is that they are usually at a hospital and enjoy full medical services.

LACK OF PERSONNEL

Besides a lack of hardware, there is a lack of people-ware. There are very few physicians trained in diving medicine. There is a great deal of difference between the physician trained to examine or treat injured divers and physicians oriented to diving medicine through a one week course.

Generally, training in the practice of diving medicine can only be had through the military or a three week course put on annually by the National Oceanic and Atmospheric Administration (NOAA). Since

NOAA began this program they have trained approximately 200 diving physicians. If physicians who have received diving medicine training in the military but are now practicing as civilians are included, the total number of diving physicians in the U.S. is probably well under 1,000. This does not mean that DAN has 1,000 physicians available for referrals, as no directory of diving physicians exists.

DAN is trying to compile a list for internal use but it will take a long time. Non-emergency callers to DAN who seek a local diving physician are often frustrated to find this out. This is particularly true of

(Continued on Page 110)

photos/Bonnie J. Cardone



Chronosport

...for the best time ever



Champagne 1000
Blue Dial/Bracelet
Men's #3405
Mini #3905
\$495



Champagne 1000
Gold Dial/Bracelet
Men's #3415
Mini #3915
\$495



Two-Tone 1000/Strap
Men's #3100 L
Mini #3600 L
\$345



Two-Tone 1000/Bracelet
Men's #3101
Mini #3601
\$395

Champagne 1000 Two-Tone 1000

Additional styling with advanced technology. Less than 9 mm. ($\frac{3}{8}$ "') in height, these elegant sports watches are designed for mature, successful and active individuals. The Champagne and Two-Tone 1000 series combine quality, performance and legibility with distinctive design. Layered in rich 18 karat gold to a thickness of 20 microns or in steel and gold plated, these watches combine the best Swiss craftsmanship and quartz technology. Stainless steel case with mineral crystal and screw down crown tested to depths of up to 1,000 feet, one day bezel and six year limited warranty with two year service intervals.

AVAILABLE FROM ALL THE FINEST DIVE SHOPS

PRICES AND SPECIFICATIONS
SUBJECT TO CHANGE WITHOUT NOTICE.



Circle # 106 on Reader Service Card

For more information contact:

Chronosport, Inc.

47 Water Street
Norwalk, CT 06854
(203) 853-9593

Please send color catalog and further information on Chronosport watches.

Name _____ Street _____ City _____ Zip _____ State _____ Phone _____ SK 12-85

ADVENTURE

ALASKA'S WHITE GOLD by Eric Morris, pg. 19, Apr.
TUG RESCUE by Michael K. Ballinger, pg. 56, July
OCEANQUEST by Walt Clayton, pg. 28, Sept.
BILL BURRUD'S ADVENTURE WORLD by Jack McKenney, pg. 64, Nov.

BOTTLE COLLECTING

BOTTLE COLLECTING by Charles McClure, pg. 104, Apr.
BOTTLED BOOTY by Jerry Pokorny, pg. 60, Oct.

CONSERVATION

HELP SAVE JAMAICA REEFS by Harry McCarty, Ph.D., pg. 94, Mar.
ABALONE PLANT by Nanci Wechsler, pg. 133, June

DIVE BOATS

AMERICAN RADIAL CUB 400 INFLATABLE by Eric Hanauer, pg. 64, Mar.
NOVURANIA'S MX-1 INFLATABLE by Eric Hanauer, pg. 54, May
INFLATABLE BOATS by Michael de la Chapelle, pg. 50, June
METZLER BRIGANT LS INFLATABLE by Fred Fischer, pg. 67, July
MERCURY 25XD OUTBOARD by Fred Fischer, pg. 40, Aug.
RIGGING INFLATABLES by Michael Joyce, pg. 65, Oct.
THE VISION by Bonnie J. Cardone, pg. 125, Nov.

DIVE EQUIPMENT

SEATEC BC JACKET by Bonnie J. Cardone, pg. 57, Jan.
DUI ANKLE WEIGHTS by Jim Walker, pg. 63, Jan.
SEAQUEST'S CATALINA WETSUIT by Jim Walker, pg. 33, Feb.
AQUANAUTICS' ARTIFICIAL GILL by Bonnie J. Cardone, pg. 34, Feb.
BONANNI PLUS 6000 COMPRESSOR by Eric Hanauer, pg. 37, Feb.
INSIDE CHRONOSPORT by Joe Bereswill, pg. 40, Feb.
CHOOSING A DIVE LIGHT by Fred Fischer, pg. 133, Feb.
HEUER'S NIGHT DIVER WATCH by Geri Murphy, pg. 135, Feb.
THE CUD SYSTEM by Jim Walker, pg. 110, Apr.
SCUBAPRO SILICONE MASK by Bonnie J. Cardone, pg. 43, Apr.
EL MAR SEA-LITE by Jim Walker, pg. 110, Apr.
SEAQUEST ADVANCED DESIGN VEST by Howard Hamilton, pg. 128, Apr.
OCEAN PRO FIN by Eric Hanauer, pg. 130, Apr.
TEKNA DV-3X by Bonnie J. Cardone, pg. 32, May
SCUBAQUARTZ WATCH by Jim Walker, pg. 55, May
PRINCETON TECTONICS DG-5 DEPTH GAUGE by Jim Walker, pg. 48, June
MARES PLANA PLUS GRAPHITE FIN by Eric Hanauer, pg. 69, June
SCUBAPRO'S BLUE STAB JACKET by Bonnie J. Cardone, pg. 73, June
VIKING PRO DRY SUIT by Jim Walker, pg. 74, June
WENOKA BAC-PAC by Bonnie J. Cardone, pg. 75, June
TEKNA DIVE TIMER II by Geri Murphy, pg. 76, June
MARES SLIP STREAM SNORKEL by Bonnie J. Cardone, pg. 65, July
WENOKA MIX 'N MATCH WETSUIT by Bonnie J. Cardone, pg. 66, July
TEKNA MASK I by Jim Walker, pg. 68, July
COLTRI MOH-6 PORTABLE COMPRESSOR by George Cozens, pg. 69, July
TUSA FULL FOOT FIN by Geri Murphy, pg. 138, July
PROFESSIONAL SCUBA INSPECTIONS by Bill High, pg. 137, July
SEAQUEST SEA VEST II by Jim Walker, pg. 33, Aug.
HARVEY'S MACAW WETSUIT by Bonnie J. Cardone, pg. 38, Aug.
TEKNA'S MIGHTY MONO-LITH by Geri Murphy, pg. 39, Aug.
LIFEGUARD SYSTEMS RESCUE BAG by Bill Gleason, pg. 42, Aug.
DUI FABRIC WEIGHTBELT by Bonnie J. Cardone, pg. 48, Aug.
AQUACRAFT II GRIPPER BOOTIES by Jim Walker, pg. 58, Aug.
TABATA'S COLOR KNIFE by Geri Murphy, pg. 108, Aug.
HEUER 3000 CHRONOGRAPH by Geri Murphy, pg. 125, Aug.
JM COUSTEAU BC by Jim Walker, pg. 39, Sept.
DACOR HI-TECH KNIVES by Geri Murphy, pg. 38, Sept.
AQUACRAFT II TRAPPER by Bonnie J. Cardone, pg. 39, Sept.
WENOKA TROPICAL WETSUIT by Bonnie J. Cardone, pg. 40, Sept.
HEUER SUPER PRO WATCH by Geri Murphy, pg. 128, Sept.
SEA RAY WETSUIT by Fred Fischer, pg. 129, Sept.
AQUACRAFT II VEGA LIGHT by George Cozens, pg. 33, Oct.
DACOR 63 CUBIC FOOT TANK by Geri Murphy, pg. 36, Oct.
CASIO TS-1200 WATCH by Jim Walker, pg. 40, Oct.
PRINCETON TECTONICS PTC-700 CONSOLE by Geri Murphy, pg. 19, Nov.
DARCON'S SEARCH I DIVE LIGHT by Geri Murphy, pg. 49, Nov.
ORCA EDGE UPDATE by Geri Murphy, pg. 54, Nov.
PAPER 'N' INK LOGBOOK by Bonnie J. Cardone, pg. 102, Nov.
THE TUSA JACKET by Bonnie J. Cardone, pg. 118, Nov.
OCEANIC SILICONE PRISMATIC II MASK by Jim Walker, pg. 122, Nov.
BEUCHAT FINS by Bonnie J. Cardone, pg. 32, Dec.
OCEANIC FREEDOM I BC by Jim Walker, pg. 49, Dec.
DIVE NEWS FROM DOWN UNDER by Geri Murphy
FAR NORTH GREAT BARRIER REEF, pg. 103, Apr.
WATERSPORT, pg. 49, May
LIZARD ISLAND, pg. 72, June
SOUTH CORAL SEA, pg. 121, July
NORTH CORAL SEA, pg. 94, Aug.
HERON ISLAND, pg. 130, Sept.
REEF EXPLORER TO PAPUA NEW GUINEA, pg. 122, Oct.
HAYMAN ISLAND, pg. 126, Nov.
GBR DAY TRIPS, pg. 56, Dec.
DIVE TECHNIQUES
NIGHT DIVE by Rick Brown, pg. 78, Mar.

BASIC U/W COMMUNICATION by Jay Fish, pg. 70, Apr.
A MILD CASE OF DCS ANYONE? pg. 118, May
DIVE BOAT ETIQUETTE by Darren Douglass, pg. 101, June
UNDERWATER CAVE RESCUE by C. Randall Bohrer, pg. 120, Dec.
DIVING MEDICINE by Alfred A. Bove, M.D., Ph.D.
BC BREATHING (Pierce), pg. 60, Jan.
LETTERS (urticaria, nausea, cold, dizziness, breast implants), pg. 108, Feb.
DIZZINESS, MIDDLE EAR, ABNORMAL HEART RHYTHM, pg. 96, Mar.
CARBON MONOXIDE POISONING, pg. 48, Apr.
MEDICAL SEMINAR RESULTS (buoyancy, vertigo, weightbelts), pg. 18, May
HYPOXIA, HYPEROXIA, LETTERS (dynamite effects U/W), pg. 16, June
BEATING BACK PAIN (Donavell), pg. 14, July
SEA SICKNESS, LETTERS (high blood pressure medication), pg. 16, Aug.
DIVING IN THE FUTURE, pg. 16, Sept.
MORE ON BC BREATHING (Donnelly, Pierce), pg. 16, Oct.
HELIUM, pg. 16, Nov.
CHAMBER CHASE (Wachholz), pg. 14, Dec.
EDITORIALS by the Publisher
WATER WARDENS, pg. 4, Jan.
THE CHALLENGE OF THE 80s, pg. 4, Feb.
THE KEY TO A SAFER SPORT, pg. 4, Mar.
TIME TO RETUNE YOUR REGULATOR, pg. 4, Apr.
SPRING BODY TUNE UP, pg. 4, May
GET THE FAT OUT, pg. 4, June
THE MAKING OF A QUALIFIED DIVER, pg. 4, July
GET THE CHOLESTEROL OUT, pg. 4, Aug.
DIVE SAFETY THROUGH ADVANCED TRAINING, pg. 4, Sept.
AVOIDING DIVE TRAVEL RIP-OFFS, pg. 4, Oct.
HOW TO RESCUE YOURSELF WHEN YOU'RE OUT OF AIR, pg. 4, Nov.
U/W DRUGS ARE A NO-NO, pg. 6, Dec.
FISH OF THE MONTH
THE NEON GOBY by Hauser/Roessler, pg. 46, Feb.
THE GRAY MORAY by Hauser/Roessler, pg. 18, Mar.
THE BAR JACK by Hauser/Roessler, pg. 78, Apr.
THE TORPEDO RAY by Randall/Randall, pg. 60, Aug.
THE CHERUBFISH by Randall/Randall, pg. 88, Oct.
GAME DIVING
ROCK SCALLOPS by Budd Riker and Susan Speck, pg. 26, Jan.
PISMO CLAMS by Paul Dooze, pg. 38, Feb.
ABALONE DIVING by Bonnie J. Cardone, pg. 62, Mar.
THE INCREDIBLE, EDIBLE FLUKE by Herb Segars, pg. 84, Apr.
DELICIOUS DUNGENESS CRAB by Jack and Sue Drafaht, pg. 30, May
FLORIDA CRAWFISH by M. Timothy O'Keefe, pg. 20, June
EAST COAST LOBSTER by Herb Segars, pg. 52, July
KING CLAMS by Charles Seaborn, pg. 62, Aug.
QUAHOGS by David F. Donavell, pg. 88, Sept.
STONE CRAB GRABBIN' by Mark M. Lawrence, pg. 86, Oct.
CALIFORNIA LOBSTER DIVING by Harry Avenil, pg. 102, Oct.
CONCH 'N' ISLAND STYLE by Greg Johnston, pg. 26, Nov.
MUSSEL MADNESS by Herb Segars, pg. 26, Dec.
LOCAL DIVING
PRO DIVE/BAHIA MAR by Mark M. Lawrence, pg. 30, Jan.
FLORIDA PANHANDLE DIVE GUIDE by Steve Lucas, pg. 37, Jan.
FORT WETHERILL by Eric And Catherine Schwarz, pg. 117, Jan.
THE LEGACY by Wendell M. Patton, III, pg. 112, Feb.
HAWAIIAN ISLANDS by Jim and Cathy Church, pg. 33, Mar.
THE PALM BEACHES BY Steve Lucas, pg. 65, Mar.
FLORIDA KEYS SCUBA SAFARI by Stephen Frink, pg. 88, Mar.
LAKE ERIE PIER by Greg Souchik, pg. 116, Mar.
SUMMERVILLE LAKE by Glen H. Sage, 120, Mar.
CARP SHOOT OUT by Alan Austin, pg. 22, Apr.
CALIFORNIA'S CHANNEL ISLANDS by Bonnie J. Cardone, pg. 31, Apr.
LEO CARILLO STATE BEACH by Ronald D. Akeson, pg. 84, Apr.
PORT LARGO RESORT by Stephen Frink, pg. 90, Apr.
FT. LAUDERDALE'S GOLDEN COAST by Steve Lucas, pg. 81, May
DIVING LANAI by Barbara Brundage, pg. 98, May
DIVING THE BIG APPLE by Joe Bereswill, pg. 137, May
NORTHEAST DIVE GUIDE by Joe Bereswill, pg. 27, June
DIVERS UNLIMITED by Steve Lucas, pg. 106, June
FLORIDA KEYS DIVE GUIDE by Stephen Frink, pg. 29, July
MISSOURI RIVER DRIFT DIVE by Robert Buttry, pg. 62, July
MONTEREY DIVE GUIDE by Steve Rosenberg, pg. 73, July
DIVERS UNLIMITED TREASURE HUNT by Colleen Glöhrst, pg. 82, July
CENTRAL PACIFIC DIVERS by Jim and Cathy Church, pg. 108, July
FLORIDA WEST COAST DIVE GUIDE by Steve Lucas, pg. 27, Aug.
SOUTHERN TREASURE by Dennis Chamberland, pg. 70, Aug.
A CALIFORNIAN DIVES MAINE by Rusty Geller, pg. 95, Aug.
OCEAN DIVERS by Stephen Frink, pg. 102, Aug.
PACIFIC NORTHWEST by Charles Seaborn, pg. 76, Sept.
BRANFORD DIVE CENTER by Steve Lucas, pg. 83, Sept.
CAPTAIN SLATE'S ATLANTIS DIVE CENTER by Stephen Frink, pg. 86, Sept.
FLORIDA'S FRESHWATER SPRINGS by Steve Lucas, pg. 51, Oct.
TEXAS TOWER #4 by Chuck P. Zimmaro, pg. 70, Oct.
LOS CORONADOS by Doc White, pg. 104, Oct.
METRIDIDUM FIELD by Steve Rosenberg, pg. 30, Nov.
FLORIDA SOUTHLAND by Steve Lucas, pg. 57, Nov.
BAINBRIDGE SPORTSMEN'S CLUB by Chris Mutchler, pg. 76, Nov.
GULF SHORES by Steve F. Martin, pg. 100, Nov.
BEAVERTAIL POINT by Christopher Willis, pg. 104, Nov.
CARDIAC HILL by Jim Walker, pg. 110, Nov.
DIVING INTO HISTORY by Bill Barada, pg. 25, Dec.
NORTH CAROLINA by Rod Farb, pg. 67, Dec.
MARINE LIFE
MOUNTING A LOBSTER by Lada Simek, pg. 104, Jan.
SHARK SENSE by Stephen Goodlad, pg. 116, Feb.
FLORIDA'S MYSTERIOUS FISH KILL by Bill Barada, pg. 126, Feb.
SEA VEGETABLES by Jeanne Culbertson, pg. 108, Mar.
SPOONBILLS by Mark Daniels, pg. 22, June
BRITTLESTARS by Donna McLaughlin, pg. 38, June
THE BUSINESS OF KELP by Hillary Hauser, pg. 104, Aug.
DIVING FOR THE STRANGE AND BIZARRE by Hillary Hauser, pg. 48, Sept.
SHARK SYMPOSIUM by Ellsworth Boyd, pg. 90, Sept.
LIVE TREASURE by George A. Brandt, pg. 80, Oct.
SEA ANEMONES OF THE PAC. NORTHWEST by Mark D. Theune, pg. 22, Nov.

NEW CRUSTACEANS DISCOVERED by Frederick R. Schram, pg. 106, Nov.
RIGS-TO-REEFS by Heyward Mathews, pg. 114, Nov.
MISCELLANEOUS
SCHOLARSHIP YEAR by Doug Kesling, pg. 113, Mar.
DAN CAN by Joe Chambers, pg. 92, Apr.
PADICARD by Paul Tzimoulis, pg. 113, May
SEALAB REVISITED by Bill Barada, pg. 52, Sept.
SUBSEA HALLOWEEN HAUNT by Stuart Westmorland, pg. 58, Oct.
OVERSEAS TRAVEL
CAYMAN AGGRESSOR by Carl Roessler, pg. 28, Jan.
U.S.V.I. DIVE GUIDE by Jim and Cathy Church, pg. 65, Jan.
HOLIDAY INN SUPERDIVER PACKAGE by Geri Murphy, pg. 89, Jan.
CAYMAN EXPRESS by Geri Murphy, pg. 93, Jan.
CAYMAN SUPERGUIDE by Geri Murphy, pg. 57, Feb.
PIECES OF EIGHT by Steve Lucas, pg. 93, Feb.
CAYMAN ISLANDER by Barbara A. Currie, pg. 73, Mar.
NAUI DIVES CAYMAN by Carol Winkler, pg. 82, Mar.
BLACKBEARD'S CRUISES by Robert F. Burgess, pg. 65, Apr.
THAILAND by Carl Roessler, pg. 74, Apr.
GUARANTEED FUN by Geri Murphy, pg. 80, Apr.
CAYMAN DIVING VILLA STYLE by Barbara Currie, pg. 82, Apr.
ANDROS BEACH HOTEL by Barbara Currie, pg. 86, Apr.
BAHAMAS BOUND by Stephen Frink, pg. 57, May
CAYMAN KAI by Barbara Currie, pg. 91, May
PIRATES IN PARADISE by Steve Lucas, pg. 100, May
SOTO'S REEF by Geri Murphy, pg. 102, May
VANUATU'S HIDEAWAY ISLAND by Benjamin Glick, pg. 107, May
BELIZE DIVE GUIDE by Stephen Frink, pg. 77, June
CAP'N DON'S HABITAT by Barbara Currie, pg. 95, June
CAYMAN DREAM by Rick Frehsee, pg. 104, June
DIVING WITH DON FOSTER by Barbara Currie, pg. 112, June
THE ISLAND FANTASY by Steve Lucas, pg. 85, July
RON KIPP'S CAYMAN DIVING LODGE by Rick Frehsee, pg. 104, July
AUSTRALIA YEAR-ROUND by Amos Nachum, pg. 67, Aug.
BONAIRE'S CARIB INN by Steve Lucas, pg. 74, Aug.
ANTHONY'S KEY RESORT by Rick Frehsee, pg. 88, Aug.
FABULOUS FREEPORT by Stephen Frink, pg. 98, Aug.
LA CEIBA HOTEL by Stephen Frink, pg. 50, Sept.
BRITISH VIRGIN ISLANDS by Jim and Cathy Church, pg. 57, Sept.
SEA AGGRESSOR by Carl Roessler, pg. 71, Sept.
SPANISH COVE AND SOUTH COVE by Stephen Frink, pg. 74, Sept.
BAY ISLANDS OF HONDURAS by Rick Frehsee, pg. 41, Oct.
BRAC REEF RESORT by Barbara Currie, pg. 73, Oct.
BONAIRE, NETHERLANDS ANTILLES by Steve Lucas, pg. 35, Nov.
THE GALAPAGOS by Carl Roessler, pg. 65, Nov.
OURACAO'S UNDERWATER PARK by Bill Gleason, pg. 68, Nov.
FANTASIE CRUISE by Amos Nachum, pg. 74, Nov.
COZUMEL by Steve Lucas, pg. 57, Dec.
SUNSET HOUSE by Jim and Cathy Church, pg. 73, Dec.
REGENCY YACHT CHARTERS by Stephen Frink, pg. 76, Dec.
THE DIVERS' EXPRESS by Geri Murphy, pg. 80, Dec.
CHUB CAY by Stephen Frink, pg. 82, Dec.
ANSE CHASTANET by Barbara Currie, pg. 90, Dec.
PERSONALITIES
AMOS NACHUM by Steve Lucas, pg. 64, Jan.
HUGH DOWNS by Ellsworth Boyd, pg. 138, May
JUDGE UNDER PRESSURE by Christopher Swann, pg. 76, Aug.
FRANK SCALLI by Hillary Hauser, pg. 41, Sept.
NOGI AWARD WINNERS by Jim Walker, pg. 38, Oct.
JULIA CHILD GOES TO SEA by Hillary Hauser, pg. 40, Dec.
PHOTOGRAPHY
EKTACHROME 100 by Jim and Cathy Church, pg. 24, Jan.
HELIX AQUAFASH 28 by Geri Murphy, pg. 81, Jan.
U/W MODELING by Tom Mount and Patti Schaeffer Mount, pg. 42, Feb.
AGFACHROME 1000 FILM TEST by Jim and Cathy Church, pg. 48, Feb.
EKTACHROME P800/1600 FILM TEST by Jim and Cathy Church, pg. 24, Mar.
AGFACHROME 50 FILM TEST by Jim and Cathy Church, pg. 28, Apr.
NIKON SB-103 STROBE by Geri Murphy, pg. 60, Apr.
FUJICHROME 400 FILM TEST by Jim and Cathy Church, pg. 28, May
SEE-THRU MARK 150 STROBE by Steve Lucas, pg. 50, May
NIKONOS LW 28 LENS by Geri Murphy, pg. 52, May
NIKONOS V HANDS-ON TEST by Jack and Sue Drafaht, pg. 44, June
SCHIZO. PHOTOGRAPHER by Dickie Walls and Phyllis Cathey, pg. 134, June
PRO EKTACHROME 64 FILM TEST by Jim and Cathy Church, pg. 18, July
DYFO SUB 35 HOUSING by Geri Murphy, pg. 70, July
IMAGES OF EAGLES by Dickie Walls and Phyllis Cathey, pg. 82, July
SR 2000 STROBE by Geri Murphy, pg. 36, Aug.
AGFACHROME 100 FILM TEST by Jim and Cathy Church, pg. 46, Aug.
1984 PADI PHOTO SEARCH WINNERS by Jeff Mondle, pg. 50, Aug.
SR 3000 STROBE by Geri Murphy, pg. 36, Sept.
FUJICHROME 100 ROP FILM TEST by Jim and Cathy Church, pg. 46, Sept.
NIKONOS 20MM LENS by Geri Murphy, pg. 126, Sept.
PRO EKTACHROME 100 FILM TEST by Jim and Cathy Church, pg. 26, Oct.
USA PHOTO CONTEST WINNERS by Paula Novotny, pg. 90, Oct.
THE RIDDLE OF FILM SPEED by Jim and Cathy Church, pg. 50, Nov.
3M 400 COLORSLIDE FILM by Jim and Cathy Church, pg. 28, Dec.
NIKONOS 15MM LENS by Geri Murphy, pg. 54, Dec.
REGULATORS
U.S. DIVERS CONSHLF SE by George Cozens, pg. 58, Jan.
SCUBAPRO'S MARK III/HP by George Cozens, pg. 58, Mar.
IDI SUPER STAR II by George Cozens, pg. 58, Apr.
ROYAL AQUA-LUNG SL by Eric Hanauer, pg. 34, Aug.
NEMROD ARIES by Eric Hanauer, pg. 34, Sept.
TABATA TR-100 by Eric Hanauer, pg. 34, Oct.
SCUBAPRO'S BAL. ADJ. SECOND STAGE by Eric Hanauer, pg. 52, Nov.
GSD S-300 by Eric Hanauer, pg. 126, Dec.
SCUBA QUIZ by Dennis Graver
DIVING COMPASSES, pg. 11, Jan.
SUBMERSIBLE PRESSURE GAUGES, pg. 9, Feb.
THE OCTOPUS, pg. 11, Mar.
DISORIENTATION, pg. 11, Apr.
DIVING SKILLS-BUDDY BREATHING, pg. 11, May
EQUIPMENT-WEIGHTBELTS, pg. 11, June
DIVER'S MATH, pg. 9, July

(Continued on Page 44)



New Nikonos-V technology frees your creativity.

The Nikonos-V, already the world's best underwater camera system with its new sophisticated technology, keeps improving as you expand its capabilities with the full range of available accessories.

With the amazing SB-102 and the new, trim, compact SB-103 Speedlights you can for the first time take underwater flash photographs without measuring or calculating anything. A full line of lenses covers above and below water uses, plus a close-up outfit, viewfinders, filters, cases and more.

Talk to your Nikonos dealer. He'll help you build the

system that's right for you. And because it's an underwater, weather-proof, rugged Nikonos system, you'll be able to go where other cameras can't and bring back pictures you could take no other way. Membership in Nikon USA Club is free with every purchase when you submit the Nikon Inc. Warranty Application. For further information, please contact Nikon Inc., 623 Stewart Avenue, Garden City, New York 11530. Lit/Pak #58.

Nikon
We take the world's
greatest pictures.®

Technifacts

BY E.R. CROSS



There are more films with predominately underwater footage reeling around the country than I imagined there would be. Since my request for information on such films in May, many titles have been located. A list of all known "commercially produced" films up to the year 1960 follows. Since 1960 so many films have been made that it is not feasible to list them all.

This inventory of underwater and ocean oriented films is, of course, not complete. I would like to thank Jim Conway of Pinson, Alabama for his help in compiling this information. Some of the early diving and diver related films are in

his library. Films in my library are indicated by #; films in Conway's library are indicated by an *. Other early underwater films are known to have been made but, so far, copies have not been found. Perhaps Technifacts readers can help locate these—and additional—early diving films.

The following is a list of films by categories:

FEATURE FILMS

Approx. Year

1. *Sixteen Fathoms Deep*1948
2. *The Frogman*1951
3. *The Sea Hornet*1951
4. # *Beneath the Twelve Mile Reef*1953

Number 4 is a sponge diving romance.

I was particularly pleased to get a copy of this film because of the unusual way the director treated a case of bends that developed in his star sponge diver: He was placed in an ice pack. Perhaps this is where the fable of treating bends with ice evolved.

5. *Underwater*1955
6. *The Sharkfighters*1956
7. *The Silent Enemy*1959
8. *The Silent World*????

Number 8 is a Cousteau feature and, while made after 1960, certainly should be included as one of the great films. Also, it helped popularize sport diving as nothing else did.

SPORTS SUITS





'Lycra'
Action Suit
The Original
and Best

FREEDOM with protection against:

- CORAL CUTS
- JELLYFISH STINGS
- COLD (Under Suit)
- CHAFING (Under Suit)
- SUNBURN
- ABRASIONS

P.O. Box 2827, Sepulveda, California 91343; (818) 906-1676

Photo: Stephen Frink

circle #108 on Reader Service Card

You're missing the opportunity to start taking great close-up pictures, because Nikon will give you a set of extension tubes worth \$144, when you buy a Nikonos-V. You're also missing the opportunity to get \$100 off on some really great dive vacations in the Caribbean and Florida* because Nikon will give you a \$100 travel certificate each time you buy a Nikonos-V or an SB-102 or SB-103 Speedlight.

Now you're really set for the diving vacation of your life. You can use these certificates at any of six fabulous locations: that include such world famous

professionally run, dive resorts as Andros' Undersea Adventures, Andros, Bahamas; Captain Don's Habitat, Bonaire; Spanish Cove, Grand Cayman; Port Largo Resort, Key Largo, Florida; Anthony's Key Resort, Roatan, Honduras and Flamingo Beach Hotel, Bonaire. Each resort has been hand-picked for the beauty of its undersea life and that means you'll get the greatest pictures of your life with your new Nikonos-V outfit. You can get started on this deal of a lifetime by seeing your Nikon dealer for details and then making your getaway.

*Only one \$100 certificate per person per one week vacation may be redeemed at a time.

If you haven't planned a getaway on our giveaway, look what you're missing.



Nikon
We take the world's
greatest pictures.®

Nikon
USA CLUB

Membership in Nikon USA Club is free with every purchase when you submit the Nikon Inc. Warranty Application. For more information, write Lit Pak, N-58, c/o Nikon Consumer Relations, 623 Stewart Avenue, Garden City, N.Y. 11530. circle #109 on Reader Service Card



DAN CARES

About Diving Safety

PLEASE CARE ABOUT DAN

Individual Membership \$15
Dive Club Membership \$100
Dive Store Membership \$100
Corporate Membership \$250

All donations to DAN are tax deductible

DIVERS ALERT NETWORK

BOX 3823 • DUKE UNIVERSITY MEDICAL CENTER
DURHAM, NORTH CAROLINA 27710

For information

Mon.-Fri. 9-5 (E.T.) (919) 684-2948

For 24 hour Emergencies (919) 684-8111

circle #110 on Reader Service Card

TECHNIFACTS

16MM SHORT FILMS

Approx. Year

1. # *Spearfishing in Mexico*.....1946

This half hour color film, possibly the first color underwater motion picture, was shot at Cozumel. One of the skin divers in the film was Mexico's first Olympic gold medalist in swimming; Appolinio Castillo. Appolinio died from complications following a severe case of bends a few years after the film was made.

2. # *The Steel Reefs*.....????

A Stan Waterman color film showing the profusion of marine life around the oil platforms in the Gulf of Mexico.

3. # *Adventure Parade*.....1950s

A 20 minute black and white film; the first half dealing with big game fishing and the second half with diving and underwater adventure.

4. # *Deep Sea Adventure*.....1953

Another short black and white film that shows big game fishing as well as diving. Some good footage.

5. # *Skin Diving Sea Hunt*.....1963

A short color film by United World Films.

6. # *Neptune's Playland*.....1966

A United World short film in color.

7. # *Underwater Adventure*.....????

A Sterling Film presentation in black and white of Marine Studios of Florida.

8. # *The Silent World*.....Late 1940s

I call this half hour black and white film "Cousteau's First Silent World." It was actually made by members of the Club Alpin Sous Marin, possibly the first organized diving club. Cousteau was an active member of this early scuba club and is frequently seen in the film.

9. # *Caribbean Holiday*.....????

Produced by United World Films and released by World Parade. A 15 minute black and white film of the 1940s.

10. # *Underwater*.....????

Another 15 minute black and white film from Pictoreel Sportscope.

11. # *Treasure in the Florida Keys*.....????

This film, originally in color but now aged and slightly tinted, is a pre-*Atocha* study of Mel Fisher's quest for treasure. It is interesting in the context of Mel's perseverance and recent success in his quest for Florida treasure. I recently talked with a mutual friend about Mel and asked him how Mel was. His reply, "The same as always: he just wears more gold." About Mel's gold: He's earned it—every ton of it.

12. # *Quest for Treasure*.....1958

A story of my diving for the remains of vessels burned and scuttled by Anson in the late 1500s at Zihuatanejo. A few artifacts were recovered. The second half of the *Quest* was shot at Napoopoo Bay in Hawaii during my search for the legendary Kona Galleon.

13. # *Man in the Sea*.....1969



Christmas Comes Year-Round With a White's PI 1000!

This is a Sophisticated Underwater Pulse Induction metal detector. It is easy to use, guaranteed to depths of 200 feet, and gives both an audible and visual target indication.



\$499.95

FREE CATALOG
AUTHORIZED DEALER
TOLL FREE: 1-800-547-6911

- Excellent Sensitivity for Coins, Rings, and Relics made of Gold, Silver, and Other Metals.
- Compare the PI 1000 to Metal Detectors Costing Twice the Price!



1011 Pleasant Valley Rd.
Sweet Home, OR 97386
Dept. SD-4
DEALER INQUIRIES INVITED

INTERNATIONAL CONTACT POINTS

White's Electronics, Intl., Ltd.
13 Harbour Rd.
Inverness, Scotland IV1 1RY

Burns Scott Intl.
14 Queens Rd. - 11th Floor
Melbourne 3004
Eastern Australia

circle #111 on Reader Service Card

Want to work in the diving industry? Come to the world's best commercial diving school...



Photos by LARRY CUSHMAN

Come to Houston!



About a third of the world's entry-level professional divers are trained at the Ocean Corporation in Houston. We're the biggest and the best...and the commercial diving companies in our area know it. Last year more than 50 different diving companies hired our people. More divers are hired in Houston than any place in the world. Houston is the oil, offshore construction and commercial diving capital of the world.

If you are interested in becoming a professional diver, remember these facts about the Ocean Corporation.

We teach everything you need to know to immediately go to work.

We run complete night courses as well as our regular day classes.

We have the largest full-time training staff of any diving school... anywhere.

Most of our instructors are active inshore and offshore commercial divers.

We pioneered bell diver training, in-house welding training, ASNT-level inspection diver training and Diver Medic certification.

We have our own diving division which performs specialized industrial diving operations, such as underwater NDT inspection and nuclear powerplant repair work.

We have a fine climate and good living conditions. Nearby apartment sharing and part-time jobs are readily available.

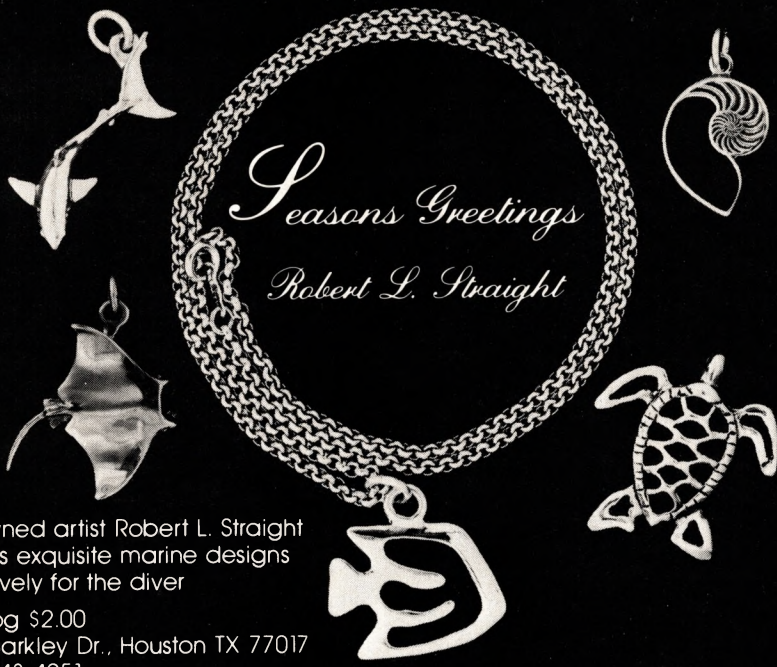
We'll help you get your first diving job.

Remember, all commercial diving schools are not alike. Check them out. Visit the school if you can. Look for real commercial diving professionalism and reputation, adequate facilities and equipment, experienced instructor staff, decent housing and living conditions, and, probably most important to you, ask them how they plan to help you get your first job in the commercial diving industry.

If you want to be a professional diver, contact our Admissions Department. Use the Reader Service Card or call us toll free - (800) 321-0298. You'll be glad you did.

The Ocean Corporation

5709 Glenmont, Houston, Texas 77081 (713) 661-0033



Renowned artist Robert L. Straight creates exquisite marine designs exclusively for the diver

Catalog \$2.00
8439 Barkley Dr., Houston TX 77017
(713) 643-4051

ILFORD CIBACHROME®
16"x24" MASK 35® PRINT
FOR UNDER \$40.

Mask 35 for contrast control, highest quality and most permanent color prints in existence. From your slides.	3 1/2"x5" .. \$ 3.25
	5"x7 1/2" .. 6.50
	8"x12" .. 14.25
	11"x16 1/2" .. 25.50
	16"x24" .. 39.50
	20"x30" .. 49.50

Send check or money order to:

COLOR LAB MIAMI
Dept. S, 111 N.E. 21 St., Miami, FL 33137
(305) 576-3207

Mask 35 from your color negatives, too.
Visa/MasterCard accepted. Fla. residents add 5% sales tax.

DIVE BOOKS: ONE-STOP SHOPPING
for books on underwater archaeology, wreck salvage, treasure hunting, photography, marine life, etc. Send \$1.50 for illustrated catalogue. Adventure Books, Dept. P2, 2 Coachmen's Square, New Canaan, CT 06840.

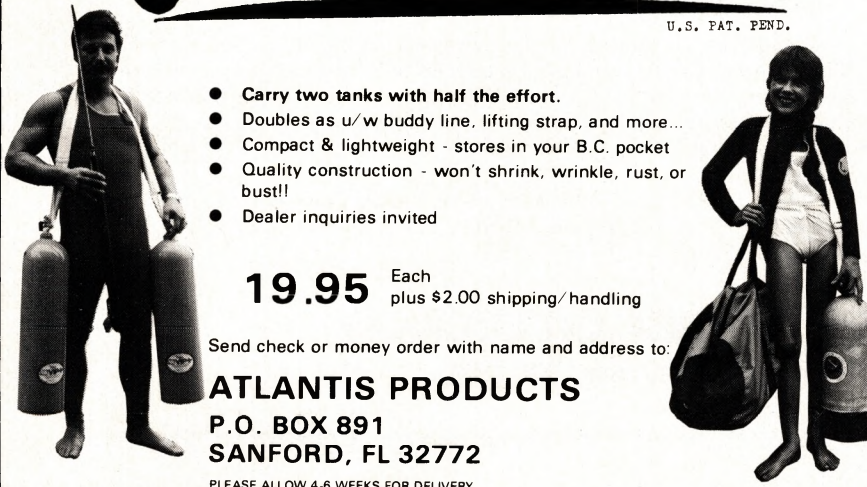
JUST GETTING STARTED
in Underwater Photography?
Snap up the January
skin diver
on sale December 31

circle #140 on Reader Service Card

ATLANTIS

TOTE-A-TANK

U.S. PAT. PEND.



- Carry two tanks with half the effort.
- Doubles as u/w buddy line, lifting strap, and more...
- Compact & lightweight - stores in your B.C. pocket
- Quality construction - won't shrink, wrinkle, rust, or bust!!
- Dealer inquiries invited

19.95 Each
plus \$2.00 shipping/handling

Send check or money order with name and address to:

ATLANTIS PRODUCTS
P.O. BOX 891
SANFORD, FL 32772

PLEASE ALLOW 4-6 WEEKS FOR DELIVERY

circle #113 on Reader Service Card

TECHNIFACTS

A Screen News Digest film, black and white. Partly about the Navy Sea Lab projects.

14.* *Ten Fathoms Deep*1952

This black and white film was produced by United World Films. An early Cousteau production.

15.* *Shark on the Line*1950

An Australian Department of Information film produced by Sterling.

16.* *Rhythm of the Reef*1951

Universal Pictures. Believed photographed by Cousteau.

16MM TECHNICAL FILMS Approx. Year

1.# *The Salvage of the Squalus*1939

An exciting black and white film dealing with the rescue of personnel from the submarine *Squalus*, which sank in about 260 feet of water—a remarkable feat of salvage and diving. I also have a VHS video tape of this film.

2.# *The Medical Aspects of Diving*1940?

This is the first, very early, U.S. Navy training film. Black and white, about 30 minutes.

3.# *The Technique of Diving*1940?

Another early U.S. Navy training film. Black and white. About 30 minutes.

4.# *The Salvage of the Diamond Knott*????

The *Diamond Knott* sank in a collision with a second vessel. The story is about the ultimate salvage of millions of dollars in canned salmon from the vessel's holds.

5.# *An Ocean Outfall*1980s

Techniques and equipment used in constructing a large diameter ocean outfall sewer running into over 200 feet of water off Hawaii.

16MM PROMOTIONAL FILMS Approx. Year

1.# *Fuel for the Fiftieth*1960

The story of the construction of Chevron's Hawaiian refinery, including underwater footage I took during the construction of pipeline and tanker mooring facilities, which I supervised.

2.# *Underwater With the Seahorse*1950s

This is a Healthways film about its two-man submarine. It is notable, sort of, for its absolute disregard for the choice of footage used. The film is supposedly a trip from Los Angeles Harbor to Catalina Island. However, footage in the film is from the seven seas. It is definitely notable for excellent footage of Dick Anderson as pilot of the sub and lovely Zale Perry as the pretty passenger for the "underwater" voyage.

SUPER 8MM FILMS Approx. Year

The following are films about or related to diving. While these have long been out of circulation in their original format, they are available in super 8mm from Blackhawk Films, Davenport, Iowa 52808.

1.# *Twenty Thousand Leagues Under the Sea*1920

There have been at least three versions of this great story. My copy is the first,

Techni-Pro

FOG FREEDOM MASKS AND FREEDOM OF CHOICE!

THE WORLD'S FIRST AND ONLY FOG FREE MASKS. FOR NEW FOUND FREEDOM UNDERSEA.

The Techni-Pro Fog Freedom will not fog! Based on temperature coefficients a Thermotech Stabilizer® counters the elements! No bottled solutions to apply.

You'll enjoy crystal clear vision and total FREEDOM undersea.

ERGONOMICALLY LOW VOLUME!

The Fog Freedom® seal is nasal-contoured to low cheekbones and high temples. Ergonomics alleviates the pressure created by most low-volume masks. Comfort and instant clearing. More FREEDOM!

THE FUTURE OF DIVING IS CLEAR!

The Fog Freedom® is another step toward Techni-Pro's main objective: "TOTAL FREEDOM UNDERSEA."

PLEASE BE PATIENT...

More than a mask the Fog Freedom® is a revolution. So availability will be limited. Please call your local dive shop to ask if they have received the Fog Freedom®.

**FOR DEALER
INFORMATION CALL:
1-800-231-1150**

IN ST. THOMAS: 809-774-5557

Techni-Pro

SUPERIOR DIVE TECHNOLOGY!

Circle #114 on Reader Service Card



Robotic submarines at 6,000 feet, divers at 600, job sites 100 miles off shore. The needs of the undersea industry are changing fast.

To get involved you need evolutionary training: The Professional Diving School of New York or the Underwater Vehicle Training Center in Houston.

As the training facilities for IUC, International Underwater Contractors, they stay well aware of the present and future needs of the industry. They constantly identify and define job requirements and create training programs and facilities to meet those needs.

PDSNY and UVTC student employment standings are excellent—94%* of their graduates are employed in related work.

Get the skills you need for the job you want... get the training that keeps pace... evolutionary training.

You can't afford to train with anyone else.

PROFESSIONAL DIVING SCHOOL OF NEW YORK

222 Fordham Street,
City Island, New York 10464
Telephone: (212) 885-0600
Telex: 147242

UNDERWATER VEHICLE TRAINING CENTER

10046 Chickasaw Ln,
Houston, TX 77041
Telephone:
(713) 690-0405
Telex: 4620684

EVOLUTIONARY TRAINING

1-800-USA-DIVE



*As filed with the New York State
Dept. of Education
FEDERAL FINANCIAL AIDS PROGRAMS AVAILABLE*
LICENSED BY N.Y. STATE DEPT. OF EDUCATION FOR THE TRAINING OF VETERANS • ACCREDITED BY NATTS

TECHNIFACTS

part of which was photographed from the Williamson Tube. I would like to get a print of the 1950s version of this film since I provided all of the diving equipment. Fred Zendar was the diving consultant. I believe Lamar Boren did much of the underwater photography.

2. # *Creature From the Black Lagoon*.....1954

This is, naturally, a sci-fi flick but is interesting because of the techniques used to provide air to the divers while working underwater in the creature costumes. Also, this is a 3-D film and special glasses must be worn to enjoy (?) the story.

3. # *Monster From Under the Sea*.....????

Another, shorter, sci-fi of interest because of the technique of providing air to the monsters.

FILMS OF THE OCEANS Approx. Year

1. # *Deep Blue World*.....????

An interesting film with a great deal of play on lighting and color. About 15 minutes. Enjoyable.

2. # *The Unknown Ocean*.....1963

This film was developed and photographed for the Australian Commonwealth Film Unit. Some good footage.

OCEAN ORIENTED SUPER 8MM FILMS

Some additional super 8mm films are available from Blackhawk Films. They are of interest because the vessels featured in them are frequently in the news.

1. # *The Normandie*—220 feet; black and white.

2. # *The Titanic*—200 feet, black and white.

3. # *The Queen Mary*—193 feet, black and white. This is about the original *Queen*.

4. # *The Tahiti Morro Castle*—240 feet, black and white. The story of a fire on board and the rescue of the passengers and crew.

As mentioned, there are other films, both 16mm and 8mm, of underwater activities. If readers know of any titles not listed here, or the dates or any corrections to this list, it will be appreciated if you will correspond with me via Technifacts, c/o Skin Diver, 8490 Sunset Blvd., Los Angeles, CA 90069.

DIVE WATCHES

Best Prices in U.S.
— 30 Days Only —

CASIO SEIKO

- | | | |
|---|---------------------|---------------------|
| | retail | Sale |
| • Seiko men's quartz 150m diver with tropical band | \$250 ⁰⁰ | \$150 ⁰⁰ |
| • Seiko men's quartz 150m diver with stainless steel band | \$295 ⁰⁰ | \$185 ⁰⁰ |
| • Seiko ladies' automatic 150m diver with tropical band | \$165 ⁰⁰ | \$109 ⁰⁰ |

Full One Year Factory Warranty
Gift Boxed • Instructions Included



Pelican Imports

P.O. BOX 66, ALTAMONTE SPRINGS, FLORIDA 32701
(305) 869-4032

Christmas Special

SAVE \$90⁰⁰ Sale \$185⁰⁰ Seiko Ana/Digi 150m quartz Diver #SPW005 retail \$275⁰⁰	SAVE \$55⁰⁰ Sale \$109⁰⁰ Seiko Automatic 150m diver retail \$165⁰⁰
NEW Casio 300m • Waterproof 990 ft. • Stopwatch • Countdown timer • Nightlight • 5 yr. battery • 2 alarms Only \$49⁰⁰	

Fla. residents add 5% sales tax.
Add \$2.50 for shipping and handling.
Allow 2-4 weeks for delivery.

OKLAHOMA DIVE CLUB

Greater Oklahoma Lake Divers (GOLD) was formed during the summer of 1985 and meets regularly (the third Monday evening of each month) at The Dive Shop, 622 F Avenue, Lawton, OK. The club's objective is to promote safe diving, family-style. Members frequently dive at Lake Tenkiller, Lake Elmer Thomas and even Lakes Travis and Possum Kingdom in Texas.

For information contact Dennis Yelton, President, GOLD, 1101 Northwest 75th, Lawton, OK 73505.

Florida is probably the world's richest area in animal fossils. The entire state is littered with the bones and skeletons of elephant-like mammoths and mastodons, saber-toothed tigers, giant beavers, tremendous bears, great cats and other strange animals that roamed the peninsula during the ice age of the Pleistocene epoch. The state is also littered with arrowheads, spearpoints, crude stone axes, knives and other artifacts of Stone Age man. This is why groping through the mucky, black water of a swampy Florida river is like diving into history—divers never know when they might make a really exciting discovery.

Nobody knows for sure why Florida has such an abundance of prehistoric animal fossils or why so many of the most powerful creatures are now extinct while lesser animals such as man and rodents survived. And, until recently, nobody had produced incontrovertible evidence that man hunted these great creatures in prehistoric Florida. Now, thanks to two sport divers, Don Serbousek and John Cottrill, both highly respected amateur paleontologists, this proof has been established.

The evidence was discovered in a swampy section of the Aucilla River, which flows from Georgia across the Florida Panhandle to the Gulf of Mexico. The site is a 130 foot deep hole where the river plunges underground and flows to the gulf. The water-filled hole proved to be a storehouse of fossilized bones of prehistoric animals mixed with crude tools and weapons used by Stone Age man. The discovery has excited the scientific community and the site is now being worked by members of the Florida Division of Archives in conjunction with the Florida State Museum.

The historic find was no accident, however. Serbousek and Cottrill have been diving Florida's swampy rivers and lakes in search of artifacts for more than 20 years. They were exploring the Aucilla River because they suspected its mucky waters concealed a bonanza. They have developed some highly specialized equipment and techniques for exploring these areas—and they have some hair-raising adventures to describe.

Serbousek and Cottrill explore the bottoms of these shallow, black-water rivers using scuba while probing through the muck with their hands and "seeing" with their fingertips. This sometimes leads them under ledges and overhangs where there is a chance of a cave-in. But both men agree they have a lot more trouble with alligators and poisonous snakes, and both are far more afraid of rattlers and cottonmouths than they are of 'gators. An alligator can be chased out of the area before they enter. But a snake must be either killed or captured before they'll feel safe.

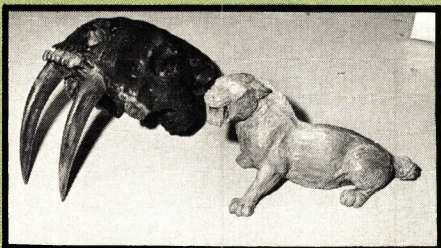
Cottrill tells of one incident in which he



DIVING INTO HISTORY

Florida River Is Storehouse of Fossils And Artifacts

BY BILL BARADA



Fossil skull of a saber-toothed cat and a sculpture of how the cat may have looked.

was climbing out of the water wearing his weightbelt and fins and holding his scuba tank above his head. Suddenly he heard Serbousek yell, "Freeze! Don't move! A big rattler is right behind you."

Cottrill was standing hip-deep in a three knot current and Serbousek says he wasn't sure if the snake was going to climb up Cottrill or up the bank. Serbousek managed to kill the snake before Cottrill collapsed.

Another, even greater danger is that of being caught in a downdraft. The murky, meandering Aucilla goes underground and reappears numerous times along its course, and divers swimming and drifting along the bottom can suddenly find themselves swept under a deep ledge or in a cave-like area where the river drops underground. In the black water they can't see these downdrafts coming. Their only escape is to do a quick reverse and try to climb back out against the current. But, in black water there is always the chance

of getting lost. A lifeline to the surface eliminates this hazard when entering a known cavern or cave.

Some of the unique equipment developed by Serbousek and Cottrill may be of interest to other divers working under similar conditions. One such creation is a water-cooled quartz-halogen light that penetrates the brown, tannic acid stained waters. It was designed and built from scratch. It provides a clear, white circle of light that can be varied in size, without the shadows and dark spots of other underwater lights. Both divers say that without this type of light, exploration in these waters would be impossible.

Other innovations include a ten ton winch mounted on the men's van, used to navigate swampy, muck-filled roads; a portable underwater dredge for removing overburden in excavations; and a double wetsuit that permits a two hour immersion in 56°F winter water (when warm water is poured between the suit's layers).

The Aucilla River site was discovered in 1968 and Serbousek and Cottrill worked it on their own until 1983. The fossils in the 130 foot deep hole were laid down during a period of the ice age when the ocean level was about 400 feet lower than it is today. Serbousek reasons the river bed was a dry gorge at that time and he believes the site was a watering hole where Stone Age men ambushed animals that came to drink. He wrote a report in 1983 in the Florida Anthropologist describing the find and stated: "The association of extinct animals with Stone Age tools at this particular site indicates that early man lived in Florida at least 15,000 years ago. Previously it has been scientifically accepted that man inhabited Florida only 5,000 to 10,000 years ago."

At the time of that report Serbousek and Cottrill had recovered 385 pieces of bone material, including parts of bear, beaver, camel, horse, rabbit, skunk, sloth, fish, alligator, turtle, turkey and other birds in addition to the 60 pound jawbone of a juvenile mammoth and other elephant parts. With these were hundreds of weapon tips and tools of bone and stone, such as drills, scrapers, hammers, flakes, awls, needles and fishhooks.

Serbousek's report in the Florida Anthropologist appealed for professionals to seriously consider the site, stating "... few significant conclusions can be made without more information, which can only be obtained with the help of trained professionals."

The Florida Division of Archives and the Florida State Museum began working the site and recovered pollen and wooden fossils. Carbon dating verified that the river was a dry gorge at the time the fossils were laid down, thus supporting Serbousek's theory. Scientists are enthusiastic about the discovery and continue to work the site.

What subsea dweller has a foot but does not use it to move; has no arms yet holds onto its host with tremendous adhesion; is considered a protective barrier for jetties and bridge structures; is ground up for fertilizer; and is savored by seafood lovers? It is often overlooked by divers as a drab clump of shells overgrown with algae and surrounded by sea anemones, yet a close-up view yields a beautiful pearly lustered inner shell with a cylindrical siphon that filters microscopic morsels of food from the passing water. This tiny bivalve is commonly known as the mussel. Scientifically, it belongs to the order Mytiloida and the family Mytilidae. Along the northeast coast of the United States, the edible species of mussel is the blue mussel, *Mytilus edulis*. It is found in clusters along rocky jetties, clinging to underwater portions of bridges, boat bottoms or almost any underwater debris. Mussels have been found attached to lobster shells, crab shells and pieces of driftwood.

Unlike most shell-type animals, the mussel has developed a unique method of locomotion. The foot itself is a weak and flabby string of muscle, but at its base there is a gland that, when compressed, ejects a gelatinous substance that hardens and forms threads, called byssal threads, that have enough holding power to support the weight of the bivalve. These adhesive threads allow the mussel to remain steadfastly in place during the most horrendous conditions. To move, the mussel simply ejects new threads farther out in the direction that it wishes to travel, releases the old threads and hangs on by the new ones. Repeatedly utilizing this process, the mussel continues its journey. This certainly is not the most speedy means of travel but it serves the bivalve admirably. With this lightning fast means of locomotion, it is no wonder the mussel spends its entire life in a very confined area.

The mussel provides a service to man that is quite often overlooked. Colonies of this animal grow rather quickly around bridge abutments and along jetties, with new mussels growing on top of older ones. This creates a thick mass of shellfish whose bulk offers the structure protection from damage caused by erosion. Gaps among mussels quickly fill in with sandy silt, further increasing the bulk of this natural buffer.

One of the main reasons for the rapid expansion of mussel beds is the bivalves' amazing reproductive capabilities. At breeding time, the mussel's mantle becomes a brooding chamber, allowing the extremely large (larger than any other mollusk) reproductive organ to produce enough tiny yellow eggs to fill the space between the shells. When the eggs hatch, the tiny fry settle on almost any object to keep from suffocating in the soft mud of the sea bottom.

GAME DIVING SERIES

MUSSEL MADNESS

A Delectable Diver's Delicacy

TEXT AND PHOTOGRAPHY BY HERB SEGARS

There are very few seafood delights that are a sure fire catch for the scuba diver. Lobsters can be very scarce and difficult to catch; spearfishing can be a very frustrating experience, leaving the diver with an empty game bag; scallops are not always easy to find; but mussels, those lovely, tasty delicacies, are always there, waiting for the collector.

Now that you've found them, how do you know which ones to take? Don't be turned off by the drab looking growth on the outside of the shell, choose the size that appeals to you and pick away. But first, remember that mussels close to sand are most likely to have a sandy taste. Because it is a filter feeder, the mollusk will draw sand into its siphon if it is suspended in the water column. So, climb higher on the wreck or the rock pile, where the sands don't reach, and pry the mussel from its foothold. Load them into your goodie bag and head for the surface. Remember, these delicacies will add weight! Proceed cautiously.

Two important cautions exist with mussels. One, if you gather the shellfish from jetties or bridge abutments, do not take those that are out of the water during tidal changes. Two, do not collect the bivalves from polluted areas and immediately after "red tides." The animal tends to absorb toxins from both of the aforementioned conditions. After the red tide has subsided, the mussel will cleanse itself rather quickly and be suitable for consumption. In some areas of the country, mussels are quarantined during certain months. Check with local fish and game departments before you go collecting.

Once on board, care of mussels is rather easy. Tie a line to your game bag and hang it off the side of the boat so the bivalves are submerged in water. Now, the real secret to cleaning mussels: As the boat starts its trip back to the dock, tie the game bag onto a 10-15 foot long, sturdy line and tow it behind the boat. The line should be tied around the bag below

the handle and not to the handle itself. The attachment of the handle to the bag is the weak point of the system and the area where the bag will tear first. The flow of water through the bag will tumble the mussels and remove the majority of the growth from the shell exteriors. A word of caution: If the boat is traveling at high speed or if the bag is overloaded, the game bag will not stand up to the drag of the water and may tear open.

Once back at the dock, the mussels must be gotten home so that they can be prepared for dinner. Transporting them covered with wet rags in a bucket, or packing them on ice would be a suitable means of transport. Do not allow the mussels to sink into melting ice water as the shock of sudden immersion in fresh water may kill them. Transporting them in a bucket of seawater can also lead to trouble. The bivalves will quickly use up all the oxygen in the water causing them to expire. Bacteria multiply quickly in a dead mussel, so they must be discarded.

Now all that remains is to cook the mussel to savor the delight of a catch fresh from the sea. Most people are amazed at the difference between a freshly caught mussel dinner and one purchased in a seafood restaurant. 

PREPARATION AND COOKING OF MUSSELS

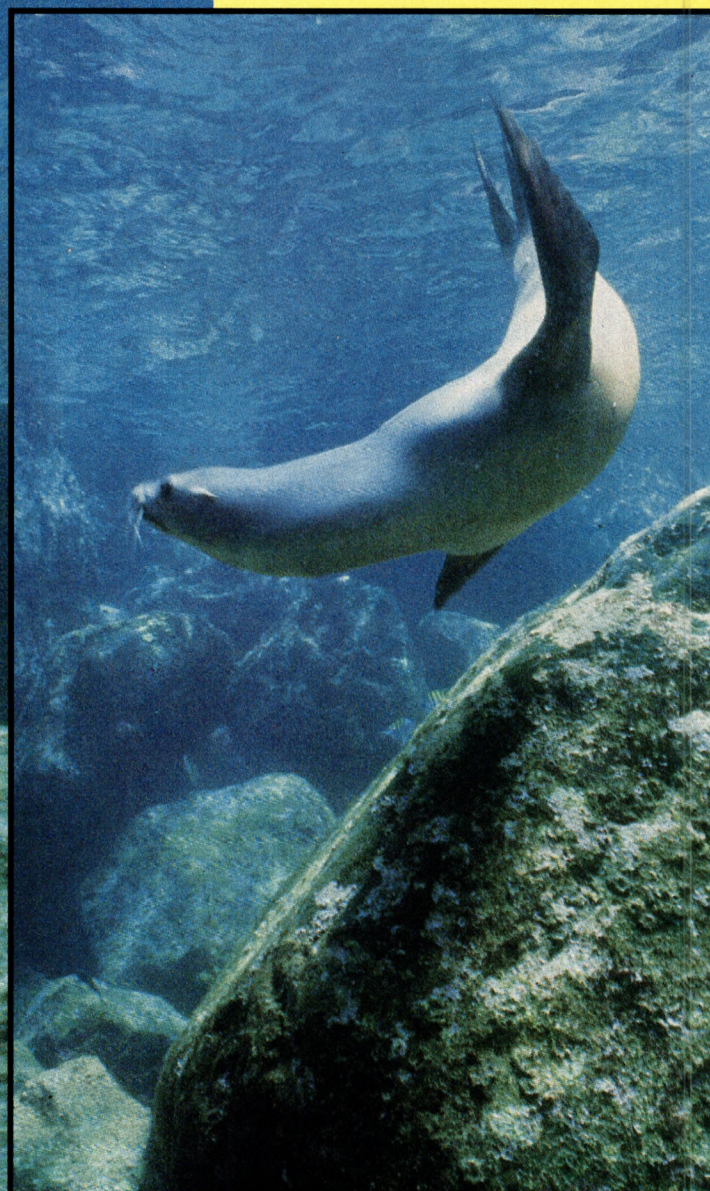
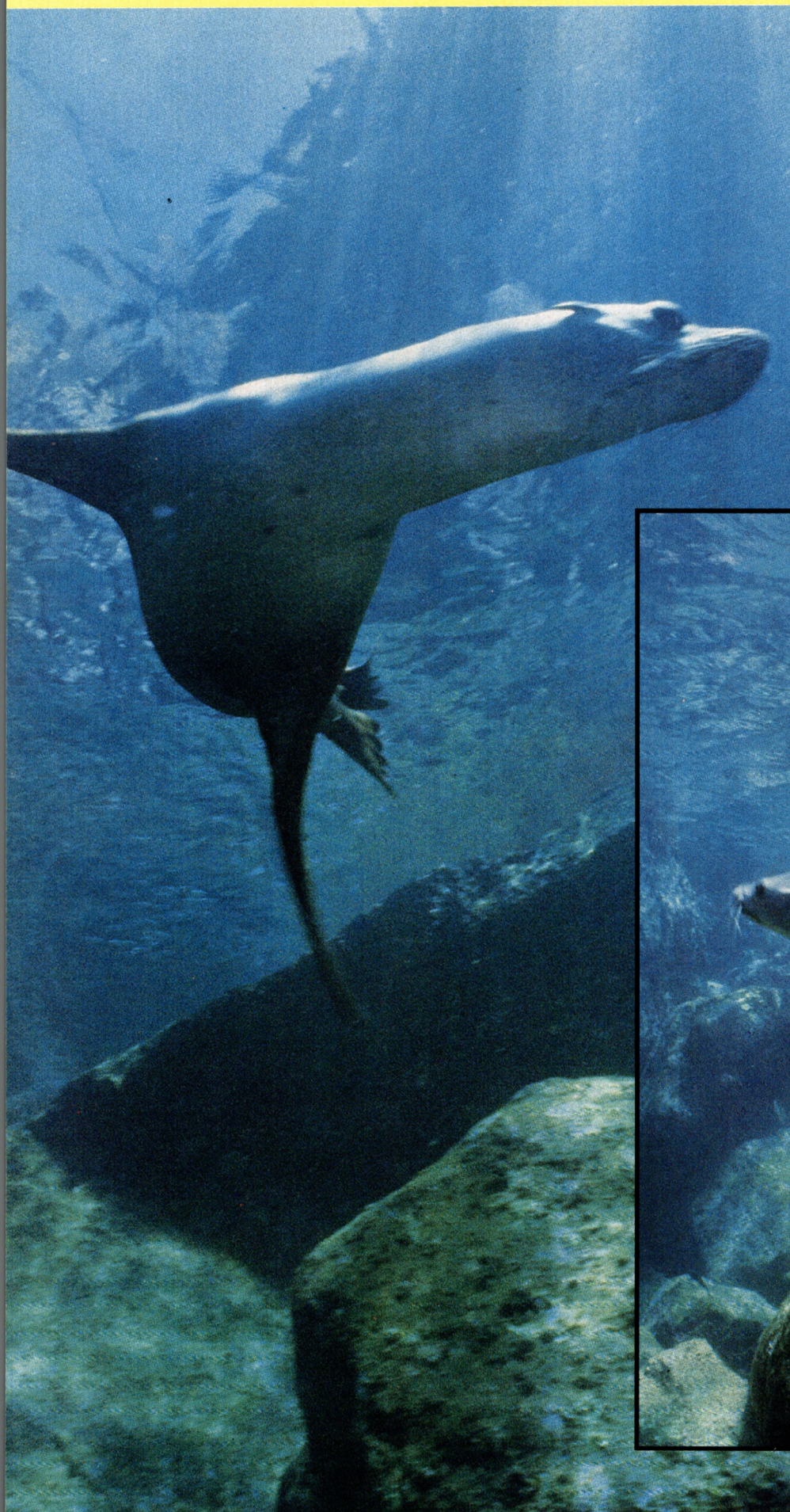
- 1) Scrub the outside of the shell, removing as much debris as possible.
- 2) Put the mussels into a pot and add about 2 inches of water.
- 3) Cover the pot and steam the mussels for approximately 8 minutes.
- 4) The mussel shells should all be open after steaming. Discard unopened shells.
- 5) Top the mussels with a marinara sauce and bake in the oven at 350°F for 15 minutes.
- 6) Serve and enjoy.



Above: In their natural habitat mussels don't look particularly appetizing, often covered with marine growth. However, they are relatively easy to collect and, when cleaned and cooked, are a special delicacy. Mussels should be collected from areas below the low tide line and away from sand. Below: Divers aren't the only ones that relish a meal of fresh mussels. Here Dan Clark feeds mussels to bergalls on the *Reef Barge*.



FILM TEST



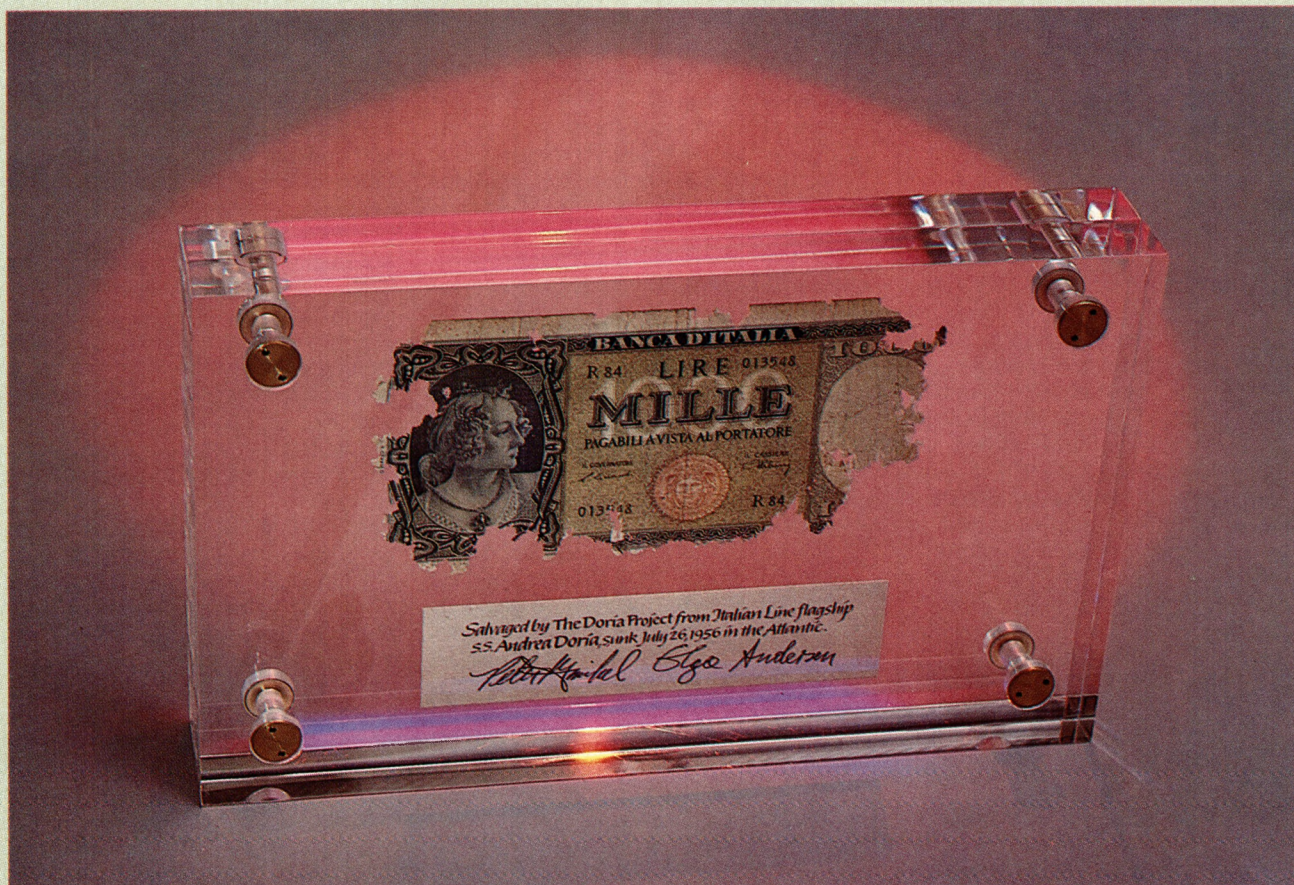
Neutral light exposures of sea lions at Los Islotes, Sea of Cortez—3M ColorSlide 400 film in a Nikonos V set for A (auto) and f/8.

Available in 20 and 36 exposure, 35mm cassettes. 3M ColorSlide 400 is

**TEXT AND PHOTOGRAPHY BY
JIM AND CATHY CHURCH**

Format.....	35mm, 20 & 36 exposure cassettes
Film speed	ASA/ISO 400, 27 DIN
U/W application.....	Low light levels
Contrast	1.70 (straight section of curve)
Color balance.....	Daylight, blue flashcubes or strobe
Processing	E-6
F/16 test.....	Basic bright sun exposure is f/16 at 1/500
Storage	50°F or lower, less than 50% humidity
Manufacturer	3M Corporation
Retail price	20 exposures \$ 7.49 36 exposures \$10.18

For more information, write directly to:
Photo Color Systems Division/3M, 223-
2SE 3M Center, St. Paul, MN 55144. 



photo/PPC staff Pat Brollier

Treasure

From The Andrea Doria

BY BILL GLEASON

As with all tales of sunken treasure, this story begins with tragedy at sea. On the calm, clear evening of July 25, 1956, the Swedish ship MS *Stockholm* and the Italian liner SS *Andrea Doria* were both plying their trade in the Northeast shipping lanes. Unknown to either captain, fate had already decided the paths of these great vessels were destined to cross.

At 11:10 pm, the bow of the *Stockholm* sliced into the *Andrea Doria*'s starboard side, striking the hull just below the captain's bridge. The momentum and terrific size of these two ships created instant disaster for both vessels. It was a mortal blow to the *Andrea Doria*, the post-war pride of the Italian fleet. Losing power, adrift on the North Atlantic, she sank 11

hours later. The *Stockholm*, badly damaged, with portions of her bow torn away, managed to make it back to port. Fifty-two people perished—46 on the *Doria* and 6 on the *Stockholm*—in a maritime tragedy that has no logical explanation.

Two days later, underwater photographer Peter Gimbel became the first man to visit the *Doria* in her final resting place. His black and white photographs, taken in eerie light 180 feet below the surface, were immediately published in the premier magazine of the time, *Life*. For Gimbel, this first dive was the beginning of a 30 year odyssey. Counting this first trip, he would mount six expeditions to the vessel over the next 25 years, log countless dives and dispel the rumors

that surround the tragedy.

Gimbel's first expeditions chronicled the decay of the once proud liner and usually found their way to the public, again in the pages of *Life*. In the early '70s, Gimbel also produced his first full scale documentary, *Blue Water, White Death*, the definitive work on the great white shark. With experience in underwater films already under his belt, Gimbel then returned to the *Doria*. In 1975, with his wife, Elga Andersen, Peter returned to the ship to film *The Mystery of the Andrea Doria*, aired by CBS in March of 1976. What mystery? The *Andrea Doria* was designed to be "unsinkable," with a series of watertight compartments that would allow even a seriously injured vessel to float. One per-

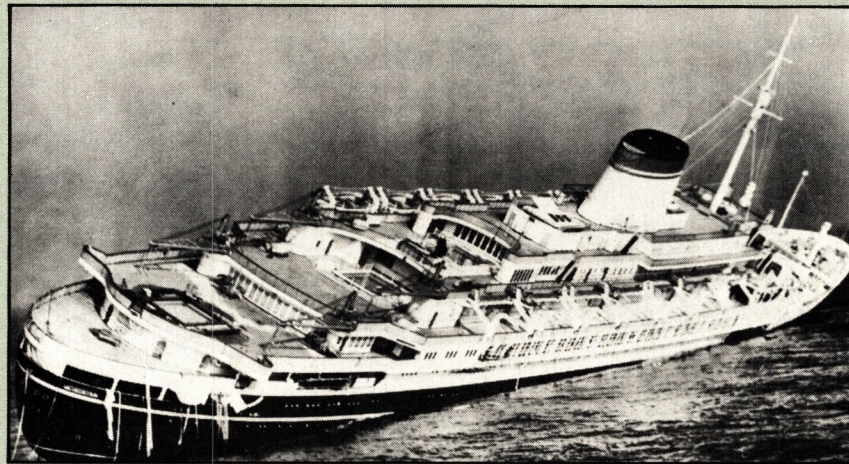
Opposite page: A 1,000 lire note salvaged from the safe of the sunken *Andrea Doria*. Notes in this denomination, as well as 50 and 100 lire, are available as commemoratives. The notes are preserved in acrylic and come with a signed certificate of authenticity.

sistent rumor claimed neglect on the part of the crew; a door between these watertight compartments was said to have been deliberately propped open and the subsequent flooding was responsible for the sinking of the ship. As a result of his work on this expedition Gimbel speculated, but could not prove, that the damage to the ship was so extensive that the compartment theory just wouldn't hold up.

The other persistent rumor concerned treasure. Speculation had it that a fortune in gems had gone down with the ship, intact in the first class safe, just waiting for a diver willing to brave the cold, dark, low visibility, treacherous currents and tremendous depth (180 to 240 feet) that mark the grave of the *Andrea Doria*. Although Gimbel discounted the gems story, he felt he could finally solve the mystery of the *Andrea Doria* with a final expedition to the wreck. In 1981, using sophisticated saturation diving techniques, The *Doria* Project was mounted. Extensive penetration of the ship was accomplished and the professional divers who worked with Peter and Elga returned home with everything they set out to find. The penetration of the hull conclusively proved that the starboard side of the *Doria* was ripped open, flooding at least three of the watertight compartments simultaneously and causing the unsinkable ship to sink.

But what about the treasure? On the deck of the expedition vessel lay a safe, salvaged intact from the wreck. Now speculation and rumor really started to fly. Were Gimbel and Elga instant millionaires? No one really knew what the safe contained. It was deposited at the New York Aquarium, first in the shark tank and later in a cold water tank. Plans were made to open it. At this time, it was known the safe was from the first class bank of the *Andrea Doria*, operated by an Italian bank, Credito Italiano. There were no known records of its contents.

On August 16, 1984, on national TV, the door to the safe was removed. As this happened, a blinding rain squall struck the outdoor event, causing some speculation that the luck of the *Andrea Doria* had followed the safe to the New York Aquarium. Packs of United States silver certificates floated to the surface of the water from the safe, confirming Peter and Elga's long



Right: The *Andrea Doria*, pride of the post WW II Italian fleet, at dockside. The huge luxury liner was designed to be "unsinkable," with a series of watertight compartments that would allow it to float, even if seriously damaged. The *Doria* did sink, in 1956, after being rammed by the *Stockholm*, and the mystery of why wasn't cleared up until Peter Gimbel's expedition in 1981. Top: The *Doria* keels far over to starboard before she goes to the bottom in 235 feet of water off Nantucket Island.



held conviction that currency, not diamonds and gems, would be the final yield of the safe from the *Doria*.

Further exploration of the safe over the next few days reinforced this theory and turned it to fact. The diamonds were just a rumor and Gimbel's odyssey was almost over. Having dispelled both of the mysteries surrounding the tragic loss of the *Doria*, only one project remained. What do you do with currency that has been submerged for more than 25 years in salt water?

Conservators were called in. These scientists and craftsmen specialize in saving and preserving artifacts from the past. In the case of the thousands of bills recovered from the safe (in packets that had fused together), this is an ongoing, painstaking job. Each bill has to be delicately peeled from the pack, washed, rinsed several times, deacidified, flattened, blotted and carefully dried under weights and laboratory conditions for several days.

This process continues today. Al-

ready, Italian notes in 50, 100 and 1,000 lire denominations have been salvaged nearly intact. This includes at least one of the serial numbers. The sea has etched a distinct pattern on each bill. United States silver certificates, removed from circulation in 1963, have also been conserved.

Peter Gimbel and Elga Andersen are offering limited amounts of these bills to the public. After the painstaking and expensive process of conservation, the bills are mounted in optical grade acrylic, one and one-half inches thick, along with a signed certificate of authenticity. These are bound at the corners with solid naval brass fasteners. The artifacts are enclosed in a linen covered box, complete with a booklet outlining the tragedy of the last day the *Andrea Doria* sailed the sea.

The artifacts retail for \$299. For further information, call (800) 544-4033 or write: The *Doria* Project, P.O. Box 2031, Nashua, New Hampshire 03061.

Beuchat's CONTACT FIN

In Ebony Or Ivory

TEXT AND PHOTOGRAPHY
BY BONNIE J. CARDONE

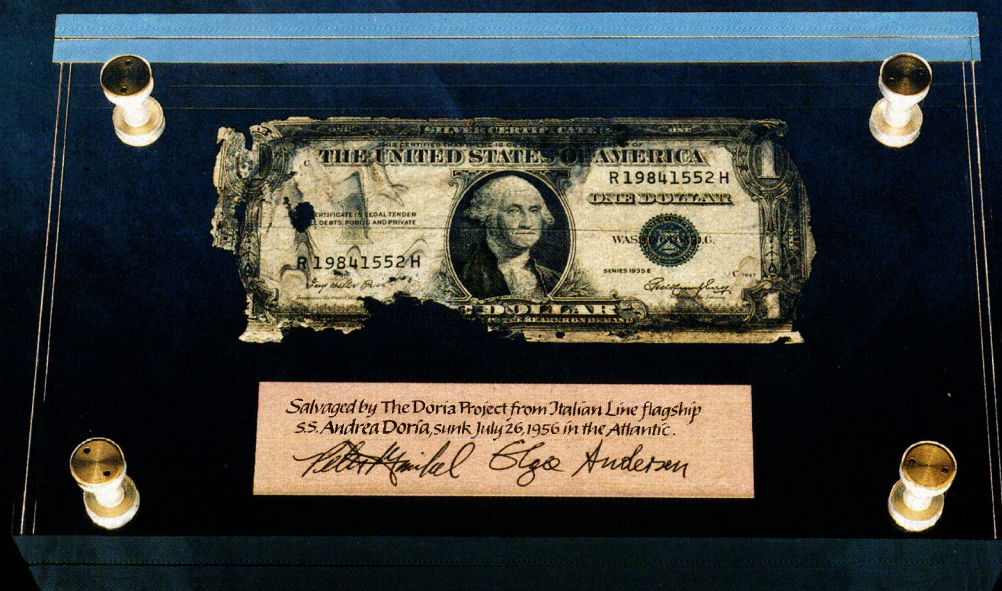
Although the name Beuchat may not be familiar to divers in the U.S., this French company has been making dive equipment for 40 years. Its founder, George Beuchat, invented the vented fin 20 years ago. Updated in a light, modern thermoplastic elastomer, this fin is now available in this country for the first time. Called the Contact, you can get it with either a white or a graphite blade.

The medium size Contacts are 20½ inches long by 8½ inches wide. They are extremely light, weighing in at 3 lbs., 8 oz. per pair. (An older pair of medium size vented neoprene fins, though three



A GIFT FROM THE SEA

LOST TREASURE FROM SUNKEN S.S. ANDREA DORIA



After more than a quarter-century at the bottom of the Atlantic, currency recovered from the **Andrea Doria** has been restored and mounted with the attention to detail the serious collector demands. EACH BILL HAS BEEN UNIQUELY PATTERNED BY THE SEA, MAKING THIS A VERY SPECIAL GIFT FOR A VERY SPECIAL PERSON.

Limited editions of United States silver certificates and Italian lire are currently being offered at \$299 each.

TO ORDER CALL 800-544-4033

The Doria Project, P.O. Box 2031, Nashua, New Hampshire 03061.

circle #117 on Reader Service Card

Santa reads it!



Diving Santas all over America read **UNDERWATER USA** because it's informative, exciting and entertaining. It's the perfect gift for yourself this Christmas and all those dive buddies on your holiday gift list. Subscribe now and take advantage of **UNDERWATER USA's** low Christmas rates. Mail the attached cards today or call **1-800-228-DIVE**.

**UNDERWATER
USA**

circle #118 on Reader Service Card

Always a step ahead.

In 1965, Beuchat started a revolution in diving by inventing the original vented fin. In 1985, the evolution continues as our Contact (silicone or graphite) fins are becoming the best selling top quality fins in the world. Look for Beuchat — the equipment of choice — from professional and military divers to the resorts of Club Med — wherever quality diving equipment is sold.

CONTACT
GRAPHITE



BEUCHAT
40 YEARS OF DIVING INNOVATIONS

Beuchat USA, Inc., 811 NW 1st Street, Ft. Lauderdale
Telephone (305) 523-7242 Telex 514339

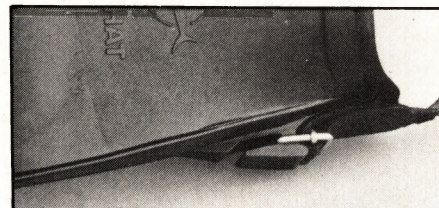
circle #119 on Reader Service Card

BEUCHAT FINS

inches shorter, weighs almost one pound more.) This makes the Contact a good choice for traveling divers.

The foot pocket of the Contact is of a soft, comfortable olefin plastic. It looks and feels like a lightweight rubber. The pocket is wide enough to accommodate almost any bootie clad foot. Because it is so pliable, there are plastic forms that should be inserted when the fin is being stored to prevent it from sagging or becoming misshaped. (This won't affect performance, only aesthetics.) The straps are traditional neoprene, with ridges to secure them in their stainless steel buckles and tabs to aid in pulling the fins on. As mentioned before, the Contact is vented, to improve performance.

Whether you choose the Contact Graphite or the Contact Clear depends mostly on your reasons for diving. If you



are an underwater model, you'll want the Clear. Its translucent white blade is very photogenic. If you are a photographer or game collector, you'll probably want the Graphite. When graphite is added to fin blades it increases stiffness and resiliency, producing a snappier fin and more powerful kick.

SKIN DIVER tested both fins on a trip to Catalina. Although I expected the Graphite to be harder to use, that was not the case. If there was a difference between it and the Clear, it was hard to detect. Both Contacts were very comfortable and easy to use. They gave me plenty of power without causing leg or ankle fatigue. They worked as well on the surface as they did underwater. Both models float in salt water.

The Contact fins are available in three sizes: small, medium and large. There are also full foot pocket versions of both. In the Clear small size the foot pocket comes in pink and blue as well as black. The full foot pocket models were so new when we went to press that no prices had been established.

Although they need no special maintenance, none of the Contact fins should be exposed to high—167°F or above—temperatures. You would be wise not to let them sit in sun in the tropics. The adjustable Contact Clear sells for \$49.95, the Graphite for \$54. This makes them among the most economical fins on the market. For more information contact: Beuchat, 408 South Andrews Avenue, Suite 202, Ft. Lauderdale, Florida 33301; (800) 248-0005.

GOLD! TREASURE!

Make your hobby pay off. From panning to dredging to metal detection, gold is a thrill to find. Let us show you how to mix profit with your diving fun. Send for our free catalog.



5" Surface Dredge
Model 5538

3 GREAT BOOKS

Making your mining more productive — "Dredging for Gold" for beginners. "Advanced Dredging Techniques" — for the experienced.

FREE CATALOG

A gold mine of sluices, pumps, dredges, tools, diving equipment, books and detectors. Send for your FREE copy.

KEENE ENGINEERING, INC.

9330 Corbin Ave., Northridge, CA 91324 • (818) 993-0411

- ☐ Please send FREE CATALOG
- ☐ "Dredging For Gold." \$7.95 (CA residents add 52¢ tax)
- ☐ "Advanced Dredging Techniques." \$7.95 (CA residents add 52¢ tax)
- ☐ "Gold Mining in the 1980's." \$15.95 (CA residents add \$1.04 tax)

Print Name _____

Address _____

City _____ State _____ Zip _____

SD



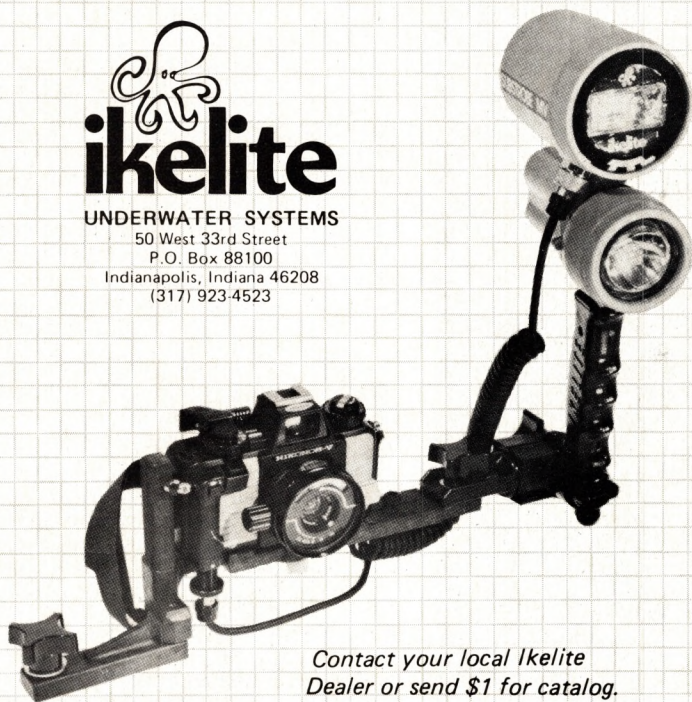
IKELITE COMPLETES THE SYSTEM

IKELITE'S SUBSTROBE "MV" PACKAGE OFFERS EVERYTHING THE NIKONOS V NEEDS TO TAKE GREAT UNDERWATER PICTURES

ikelite

UNDERWATER SYSTEMS

50 West 33rd Street
P.O. Box 88100
Indianapolis, Indiana 46208
(317) 923-4523



Contact your local Ikelite Dealer or send \$1 for catalog.

Package Includes

SUBSTROBE MV

Substrobe MV offers automatic Thru-The-Lens (TTL) flash exposure control with the Nikonos V camera and covers lenses as wide as 28mm.

NIKONOS TTL SYNC CORD

STROBE HANDLE & MOUNT I

Contour handle with light bracket for quick and easy aiming of the strobe.

UNIVERSAL MOUNTING TRAY

Fits Nikonos III-IV-V and provides convenient mounting points for accessories.

STRAP & HANDLE UNIT

Sure grip handle for one-hand camera operation, plus a second strobe mounting point.

RAPID ADVANCE LEVER

Allows fast, easy, one hand film advancement with Nikonos V.

MINI C-LITE

Aiming lite and ideal night diving lite featuring our halogen bulb.

HALOGEN BULB MINI C-LITE

The Halogen bulb Mini-C provides unsurpassed intensity in a small light that is almost indestructible. Lights powered by "AA" batteries or less than four "C" size batteries simply can NOT provide Mini-C intensity and battery life. Our special Halogen lamp is the superior choice compared to krypton or xenon alternatives.

The Mini-C utilizes a unique switch for one hand on/off control. The 6" long size is convenient to carry and can be clipped to you or your equipment. Extend its versatility with our optional holster or optional strobe aiming light bracket.

MINI C-LITE HR

Rechargeable version includes Halogen bulb, four "C" cell ni-cad batteries, and charger.

MINI C-LITE K

New Krypton bulb model providing twice the intensity of standard PR-13 bulbs.

MINI C-MARK

The Mini C-Mark is a signal type blinking strobe designed for night and limited visibility applications. It is an ideal location marker or emergency beacon, emitting brilliant flashes of light visible for several miles at the surface. Intensity is twice as bright as some units on the market. The C-Mark operates on two "C" cell batteries. It is guaranteed to 300 feet and floats bulb up. Clip this to you, your equipment, an anchor line, or slip it into the optional Mini-C holster.

MINI C-LITE



ikelite

UNDERWATER SYSTEMS

50 West 33rd Street
P.O. Box 88100
Indianapolis, Indiana 46208
(317) 923-4523

TURN US ON

Air is Life!

GET SMART! Make SPARE AIR Standard Equipment

**DESIGNED AND
ENGINEERED
BY DIVERS -
FOR DIVERS!**

SPARE AIR is a self-contained air supply with over 30 breaths of EXTRA air.

It's more than just another option, it's a **BREAKTHROUGH** in dive technology!

- COMPACT
- EASY TO USE
- LIGHTWEIGHT

write or call
**Submersible Systems
Manufacturers of SPARE AIR**

SPECIAL: INSTRUCTORS, ask about our Special Offer.

When you get ready for that next dive be sure to include **SPARE AIR** on your check list.

This outstanding addition to your equipment package is as vital to you as your air tank regulator and your Dive Buddy!



16442 Gothard Street, Unit G
Huntington Beach, California 92647
(714) 842-6566

circle #120 on Reader Service Card

MAKE DIVING YOUR CAREER AT THE NASDS INSTRUCTORS COLLEGE.

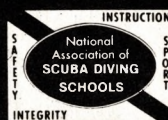
Our network of quality diving store/schools has some opportunities for people who are interested in scuba diving as a full-time career. If you are considering such a step, you owe it to yourself and your career to call NASDS after you have talked to all the others.

We will provide you with a list of store owners, resort managers, instructors and sales people who are working in the diving industry today. These people are graduates of the NASDS Instructors College.

Call our Placement Director at the NASDS Instructors College at (213) 595-5361.

NASDS Instructors College
4004 Sports Arena Blvd.
San Diego, CA 92110

State approved by V.A., Students Vocational Rehabilitation, State and V.A.



CAVE DIVING WORKSHOP

The National Speleological Society, Cave Diving Section (NSSCDS) is holding its annual winter workshop on December 28-29 in Branford, Florida. The theme of this workshop is the science of cave diving.

Saturday morning topics will include archaeological and paleontological history of the Florida spring country; safety techniques for scootering in caves; advanced decompression; and the exploration of Florida's U/W caves.

Afternoon programs will be offered in a pre-registration format, with several mini workshops, including a panel discussion with today's leading scientists on caves and cave diving; cave diving photography; emergency procedures for overhead environments; and locating new springs. Several of the afternoon workshops will have follow-up field exercises on Sunday at freshwater springs near Branford.

A film festival will wrap up Saturday's events, with presentations by leading cave diving photographers.

All divers are welcome and encouraged to attend and learn more about safe cave diving. For information or a registration form please write to: Mark Long, NSSCDS workshop co-chairman, P.O. Box 1633, Leesburg, FL 32749.

DIVERS LOCKER/ PHOTO MARINE

Divers Locker of Marietta, Georgia now has Photo Marine, a separate division for photographers. Photo Marine offers a series of photography classes aboard the *Meridian Maiden*, based in Tavernier, Florida. Only photographers and models will be allowed on these trips in the Keys, so there will be plenty of space. Photography trips to Cozumel, Mexico will also be offered.

Photo Marine has a complete underwater photo equipment sales department.

For information contact: Captain Bob Newton, Divers Locker/Photo Marine, 1475 Terrell Mill Road, Marietta, Georgia 30076; (404) 952-1011.

SCUBA IN HIGHER EDUCATION SEMINAR

A seminar, entitled Scuba in Higher Education, will be held at Indiana University December 7-8. It will be conducted by the Indiana University School of Health, Physical Education and Recreation in cooperation with NAUI, PADI, the Indiana Skin Diving Council and Southern Indiana Scuba Diving Facility.

Topics will include philosophy of diving education and scuba educational programs. Workshops on archaeology, photography, scuba equipment advances and accident management will be held.

For information contact Art Mindheim, (812) 335-4232.



DDL 1000



**DIVE TIME
AUTOMATICALLY
DISPLAYED**



**SURFACE TIME
AUTOMATICALLY
DISPLAYED**



**MEMORY RECALL OF
LAST 8 DIVE AND
SURFACE TIMES**



STOPWATCH



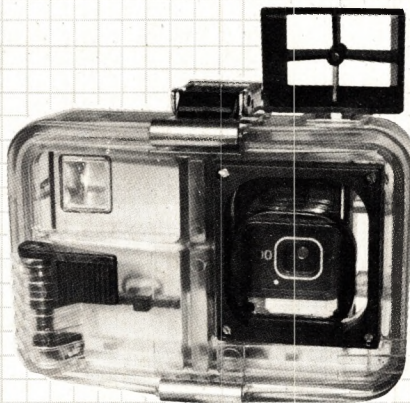
**TIME OF DAY
DAY OF WEEK
MONTH & DATE**

IKELITE DDL 1000

Ikelite's Digital Dive Log is the ultimate waterproof dive timer and watch. At a depth of 4-7 feet, the water pressure activates the DDL's dive time mode.

ALL OTHER dive timers delete the previous dive time or surface interval as a new one is begun. Only the Ikelite DDL 1000 features the memory bank capable of storing and recalling the last 8 dive times and surface intervals.

Underwater Photography was never so Simple



IKELITE DISC-CASE

Never before has anything so simple and inexpensive produced such outstanding underwater photographs. To take a picture, simply push one button; the camera's built-in flash lights the subject so the film can record all the vivid colors underwater.

The Ikelite Disc-Case features a sports-finder for framing, an optical grade plexi front for sharper pictures, and a snap-on water correcting lens allowing the camera to focus underwater as close as 2 feet. The water correcting lens easily snaps out for above water use.

DISC-CASE MODELS (all models include water correcting lens & sportsfinder.)

#5240 Kodak 2000, 3000, 3100, 4000

#5265 Minolta Disc 5

#5267 Minolta Disc 7

#5275 Ansco HR 50

#5289 Keystone 1050

DISC-CASE PACKAGE

#5290 Includes: Keystone 1050 Camera

DISC UNDERWATER PHOTO BOOK

Disc Underwater Photography is an easy to follow "How To" book covering all aspects of using disc cameras and the Ikelite Disc-Case underwater.

ikelite

UNDERWATER SYSTEMS

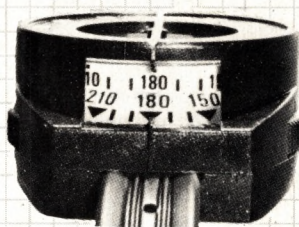
50 West 33rd Street

P.O. Box 88100

Indianapolis, Indiana 46208

(317) 923-4523

PRO-S



PRO-S COMPASS

The Pro-S is the fastest and most accurate reading of the deluxe diving compasses. This design provides instant direct reading of a course on the side or on the top without aligning any bezels or marks. Then simply rotate the knurled ring to set the Desired Course Indicator in both the side and top window for course comparison. This is the finest design in a side-reading compass showing instantly if it is level and if the course is correct. Mounts on the wrist or Pennform Console.

PRO



PRO COMPASS

The famous design that started course indicator bezels on diving compasses. The Pro Compass incorporates a low profile movable bezel to allow maximum viewing of the North indicator while permitting easy gripping even with gloves. The bezel design eliminates corrosion and sticking problems common with many other compasses. A precision jeweled movement provides the fast and precise accuracy of this famous compass.



How to increase your Bottom Time in one easy step

If you're like most divers the best part of your day is spent underwater doing what you enjoy—diving, not calculating your decompression or no decompression status. That's why diving professionals around the world depend on the EDGE™ for all their dives. They know that the EDGE™'s continual measurement of uptake and discharge of nitrogen is the only way to give them safer limits and more dive time.

Suggested Retail Prices:

EDGE™ \$595 HOLSTER (pictured with EDGE™) \$20

"I was greatly impressed with the way the EDGE™ works and the protection and easy security it gives those of us who have to do frequent up-and-down diving in depths." Eugene Clark, Ph.D.

"We all liked the EDGE™. The general feeling was that it could add significantly to both bottom time and safety on many dives. — Again, it's a great product." George S. Lewbel, Ph.D.

"The introduction of the EDGE™ by ORCA Industries in 1983 brings an innovation to divers equal to the original introduction of scuba." Bruce Bassett, Ph.D.

SEE YOUR LOCAL DEALER, OR WRITE: ORCA INDUSTRIES, INC.

495 BELLEVUE ROAD • DIAMOND STATE INDUSTRIAL PARK
NEWARK, DE 19713; PHONE: (302) 366-8403

Remember...The bottom line is Bottom Time!

**The
EDGE™**
...Finally, underwater reliability!

circle #121 on Reader Service Card



ATTRACT A MORE PLAYFUL CROWD

**BE PLAYFUL
AS A DOLPHIN
AND ATTRACT THEM TOO.**

Aqua Scooter is the most exciting and affordable water recreation product of the decade! This sportable portable is safe and simple to operate. Just add water for instant fun.

Add onto the fun with these Aqua Scooter options:
• Rugged Carry Case • Tote A Boat—two man inflatable boat • Aqua Skimmer—10' fiberglass boat • Boat Bracket—for outboard use
• BESK—Boaters Emergency Survival Kit • And for underwater exploration, Aqua-Pressor and Scuba Tank Kit.

Go overboard on fun today! See your Aqua Scooter dealer and tell him Flipper sent you.

Call or write: Aqua Scooter • 79 Hazel St. • Glen Cove, NY 11542 •
1-800-632-0078 • In New York State Call: 1-516-676-4662.
Dealer inquiries welcome.

**aqua
SCOOTER®**

circle #122 on Reader Service Card

SCUBA PARTS

Scuba Parts has become the exclusive national distributor of Pisces Books. Pisces publishes a full line of books of interest to divers and snorkelers. Scuba Parts manufactures and distributes accesso-



ries to dive stores throughout the United States and the world.

For more information about Pisces Books and Scuba Parts contact: Scuba Parts, Attention: Scott Burns, 3826 Old Easton Road, P.O. Box 949, Doylestown, Pennsylvania 18901; (215) 345-5553 in Pennsylvania; (800) 424-4978 outside Pennsylvania.

TANK INSPECTOR TRAINING

Professional Scuba Inspectors (PSI) is offering comprehensive visual cylinder inspection (VSI) training courses throughout 1986. For the dates and location of a course near you contact PSI, 6531, NE 198 St., Seattle, WA 98155.

DIVER COMPUTER NETWORK

What may be the first computer accessible network devoted to the diving community has been operational 24 hours per day over the telephone at no charge. For those divers, dive stores or instructors who already own or are thinking of purchasing a home or office computer, the addition of a \$60 device called a telephone modem will allow them the opportunity to communicate electronically with other divers around the country.

Divers can leave bulletins on the Divers Network asking for information about diving an area they might be planning on visiting or can leave information about their home areas for other divers to consider.

To access the Divers Network all that is necessary is to place a telephone call through your computer to A/C (813) 332-0617 using the following defaults: 300-1200 baud. 7 bits, 1, bit EVEN parity. Or call voice line (813) 334-4616 for further information.

The Divers Network is compatible with all home or micro computers including Radio Shack, IBM, Apple, Commodore, Atari, etc.

Get ready for the good times with our comfortable, cozy dry suits and undergarments. A broad choice of buoyancy



your weekend

compensators, plus other great inflatables like Manta II, Bluefin and Malibu. Super back packs. Sensational HydroJet fins. Arbaleté spear guns and cases. Fine silicone masks, snorkels, dive and travel bags. Everything! See our oceanful of well-designed, ruggedly handsome dive products at your Seatec dealer or send \$1.00 for our full-line catalog. And enjoy your weekend!



Thermotec
Advanced dry suits & polypropylene undergarments



New

Stingray
Comfortable, contour-fit buoyancy compensators with slimline styling for low drag

SEATEC
600 N. Batavia
P.O. Box 1109
Orange, CA 92666
(714) 639-6662
Cable: Seatec Orange
TWX 910-593-1648

Seatec/Cavalero are divisions of Inflatable Systems, Inc.

BONAIRE Sea Creatures

Handcrafted 14K gold seacreatures. Order direct from our U.S. workshop at the same low Caribbean prices as in our Bonaire store.

Money back guarantee. Orders must be accompanied by payment. Send check, money order, Visa or Mastercard, payable to Bonaire SeaCreatures. Please include card # and expiration date. All prices include postage. Pa. residents add 6% sales tax. Catalogue \$2.00

To order direct write:
Bonaire Sea Creatures
730 Sansom Street
Philadelphia, Pa. 19106

**Littman Jewelers N.V.
BONAIRE**



Buy a charm now and receive this sterling silver flamingo FREE when you visit our store in Bonaire.

circle #124 on Reader Service Card



BROWNIE'S THIRD LUNG

For 14 years - the - original and only "Dive All Day" systems. Choose from more than 10 light and compact models. Major Credit Cards Accepted

Write:
P.O. Box 290357
Ft. Lauderdale, FL 33329

CALL: 800/327-0412 • FLA: 305/584-5570

circle #125 on Reader Service Card

New Nikonos 20mm Lens

\$389.95

view finder
\$109.95



PHOTO MARINE

1475 Terrill Mill Rd. Marietta, GA 30067
(404) 952-1011
5 Day Photo Course in Florida Keys \$589

circle #126 on Reader Service Card

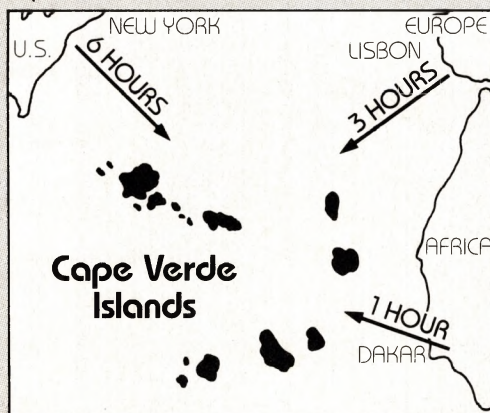
DISCOVER CAPE VERDE

Cape Verde Islands, West Africa

"We've got magnificent visibility, second to none... lots of fish and lobster... gigantic volcanic caves and canyons... nearly 900 wrecks dating from the 15th century onward... a diver's paradise you've got to see to believe. We're undiscovered, unexplored, and unheard of. But we're about to change all that."

Jim McCallister
Director of Diving Operations

Discover Cape Verde, Inc. is involved in a fascinating investment opportunity to help develop what will become one of the world's most exceptional dive destinations. This is a one time opportunity. For further information call or write:



Discover Cape Verde, Inc.

1331 Irving St., NW • Washington, DC 20010
(202) 745-0061 • Attn: Ray Almeida

circle #127 on Reader Service Card

JULIA CHILD GOES TO SEA

Famous Chef Visits
Santa Barbara Urchin Divers

BY HILLARY HAUSER

The famed chef of American television, Julia Child, went on a sea urchin diving expedition recently, taking with her a spoon so she could eat what divers brought up immediately.

The salty episode was filmed by a Good Morning America crew in Santa Barbara, California. Julia moved around in front of the cameras for four segments called Julia Child's Santa Barbara.

The idea of the series, said producer Sonya Selby-Wright, was to show Julia in her favorite cooking grounds, Santa Barbara. The first segment features the historical Spanish side of town, with Julia visiting Mexican food establishments; the second focuses on Julia visiting avocado and lemon ranches; and the third has her



Julia Child examines a catch of sea urchins aboard a Santa Barbara, CA boat.

on an offshore oil platform where a chef cooks up a special, out-at-sea feast.

An important part of the series shows Julia on a sea urchin boat, talking with divers Jon Holcomb and Greg Hufft about the spiky seafood delicacy, which she said is one of her favorites.

"I like to eat them as is," she said. "If more people ate sea urchins, they'd love them. I brought my special sea urchin spoon for this occasion."

She talked with the divers about the sea urchin/sea otter problem that faces the Santa Barbara Channel and expressed amazement at a Fish and Wildlife plan to transplant otters to the offshore islands. These islands are lucrative diving grounds for sea urchins, which are a favorite food of the otter.

Julia said she worried about what would happen to the urchin fishery in the Santa Barbara Channel. "Who thinks about people?" she asked. "Otters are

cute, but aren't there other places for the otters, so we can all get along?"

Fish, said Julia, is a culinary love of hers, but she is "passionate" about the way it is kept. How fishermen handle the fish is one of the most important parts of fish-eating, she said. "Fish have to be bled and gutted at sea. It makes all the difference in the world."

The best way to cook fish, Julia said, is the "simple way"—poached on top of the stove, in a little salted, vinegared water. While she thinks California halibut is "too mushy," she finds shark "delicious."

Accompanying Julia to sea was her husband of many years, Paul Child. The two have been married since the end of World War II. ("I can't remember, it seems it was about then. I haven't got it with me," said Mr. Child.) The couple traveled extensively with his duties in the Foreign Service, which included two and one-half years in China, and today they continue traveling with Julia's cooking exploits. Their main home is in Cambridge, Massachusetts, but they spend part of each year in Santa Barbara.

"All that ice, snow and slush—we had to find a more reasonable place for the winter," Julia said. "We came to Santa Barbara and we were suddenly transported to heaven."

She said her first reactions to the ocean were anything but dispassionate. "I was three years old and they took me to the beach," she recalled. "I sat down and screamed. I wouldn't go anywhere near it."

She said her career is the result of good luck and timing. "I was lucky being the first cook on TV and I also came along at a time when people were interested in cooking."

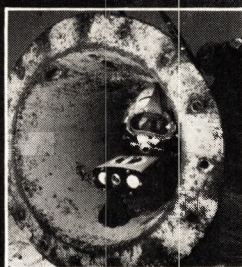
In spite of the busy schedule she now keeps because of her successful career, her life revolves mainly around her marriage. Julia and her husband are inseparable. She is a towering six foot, two inches, he is not quite as tall. He has a droll and clever wit, she has the crazier kind. ("She's wild, you never know what she's going to come out with," he said.)

At the Santa Barbara Harbor, Julia visited with local fishermen and watched a shrimp boat unload its catch. She expressed concern about the baby fish that were being tossed out by the shrimp fishermen. "Don't you do anything with these fishes?" she asked. "They'd be delicious in soup, or you could fry them."

She asked someone about the pelagic red crabs, those crustacean holdovers from El Niño. Was there much meat in them, or could a person grind up the whole animal?

The Good Morning America crew moved about, filming Julia talking about the shrimp and crabs. Paul Child, meanwhile, stayed in the background, watching his wife in action. Every day with Julia is variable, he said. "That's one thing about her," he explained, "you can never be sure what is going to happen."

3 WAYS TO FIND WEALTH UNDERWATER



Not every diver finds a Spanish galleon. But any diver can find a rewarding career in the diving industry. Florida Institute of Technology has three ways to get you started.

UNDERWATER TECHNOLOGY. A high-tech program that combines specialized diver training, standard commercial skills, and selected academic courses. You graduate with a Commercial Divers Certificate, an A.S. degree, and enough smarts to launch a high-paying career.

COMMERCIAL DIVING PROGRAM. Essentially the same education as Underwater Technology, but without college academics. It's a 22-week program that rewards you with intensive diver training, a Commercial Certificate, and quick entry into the work force.

SPORT DIVING OPERATIONS. This 2-year Associate degree program gives you a highly specialized education in underwater and topside skills. Support courses include seamanship, business fundamentals, and marketing techniques.

Return the coupon and we'll go overboard for you.

Florida Institute of Technology

Jensen Beach Campus/Office of Admissions

1707 N.E. Indian River Drive/ Jensen Beach, Florida 33457

(305) 334-4200 or (800) 241-7826 or (800) 433-0116 FL

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____ Age _____ HS Grad. Date _____

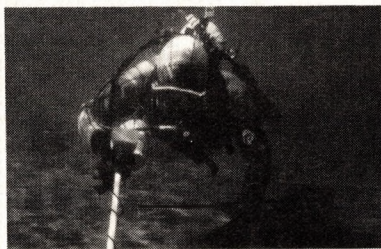
Program Interest _____

Transfer Information ☐

F.I.T. admits students of any race, color, or national or ethnic origin and does not discriminate on the basis of handicap in admissions or access to its programs.

SD121285

START TREASURE DIVING...



...WITH TOP OF
THE LINE
EQUIPMENT

The Fishers Pulse Detectors

- Complete line of underwater metal detectors
- Hand-held models
- Boat towed (Magnetometers also available)
- Used the world over—the divers' choice for 20 yrs.
- Models can be upgraded later if desired
- Two year warranty
- Purchased by the Navy, Coast Guard and FBI
- Priced from \$359
- Engineered for disassembly without warranty loss

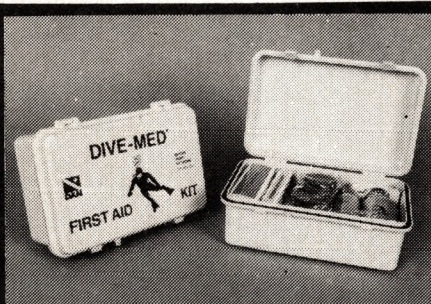


For more information about Fishers' fine products
write for our free catalog.

J.W. FISHERS MFG. CO.

ANTHONY ST. TAUNTON, MASS. 02780
(617) 822-7330 CALL COLLECT FOR INFO.

circle # 129 on Reader Service Card



DIVE - MED®

DIVERS FIRST AID
KIT

(The Perfect Kit for
Your Diver)

Contact
Your Local Dive Store
or

MIDWEST LIFE SUPPORT SYSTEMS

9832 Manchester Rd.
St. Louis, MO 63119
(314) 968-8089

circle # 229 on Reader Service Card

HENDERSON DESIGN PORTFOLIO

Henderson's 1986 line of wetsuits features a new method of creating a suit to fit your own unique style. Henderson's Design Portfolio offers you all the options of exciting new patterns, vibrant colors and exclusive print fabrics.

Your professional dive store will assist you in selecting the right size, thickness and pattern. Or, contact: Henderson Aquatics, 1 Whitall Avenue, Millville, NJ 08332; (609) 825-4771.

SCHOLARSHIP TO DIT

The Institute of Diving (IOD), Panama City, Florida, was recently awarded a scholarship to DIT. IOD, in turn, granted the award to Panama City Marine Institute graduate Don Pennington. Don lives on board DIT's main classroom training barge and, in turn, helps maintain the school premises.

WET FACILITY

Water Education Training (WET) has opened a new 3,000 square foot training facility at 7094 Miramar Road in San Diego, CA. YMCA international certification classes will be held in the new classroom. Instruction, ranging from skin diving and junior scuba diver through instructor will be offered, as well as scuba lifesaving accident management (SLAM).

The new facility has a rental department offering such specialty items as spearguns, ocean kayaks, inflatables, underwater lights and cameras. The photography department provides equipment and services.

Call (619) 578-DIVE to request information on class dates and times or special audio/visual presentations.

CO PEOPLE

The College of Oceaneering has three new training department staff members.

Doug Terrel is training supervisor in charge of planning, organizing, supervising and implementing the college's programs. Wayne Montanio is a new air diving and mixed gas instructor.

Floyd Putman is the new facility maintenance supervisor in charge of the safety and maintenance of surface equipment, diving equipment, facilities and barges.

In addition, Tom Mix has been appointed managing director of operations. He will be in charge of all operations, classes, workshops and seminars conducted by the college.

The College of Oceaneering, in Wilmington on the Los Angeles Harbor, was founded in 1969. It is an accredited community college.



SURE CATCH

Lobster Loop

Catch Lobsters on scuba or free diving. Easy to carry on dives! Easy to use anywhere! Will catch any kind of lobster; spiny, clawed, slipper.

Will not mark or hurt the lobster, or break off the legs or antennae. It's safer than catching lobsters by hand.

Can catch 4 out of every 5 lobsters you see.

Non corrosive parts. Satisfaction guaranteed. Prices include postage and handling. Loop tightens on tail, body or horn.

20" (for close quarters) **\$19.00**

30" (long reach) . . . **\$23.00**

Both for only . . . **\$40.00**

Check, money order, C.O.D.,
Mastercard, Visa

LOBSTER LOOP

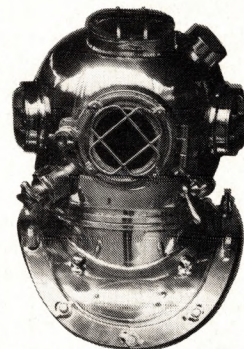
BOX 12214

ALBUQUERQUE, N.M. 87105 USA
(non USA residents add \$5.00 each)

circle # 130 on Reader Service Card

WEAR A DIFFERENT HAT BECOME A PRO DIVER

One complete course including air, mixed gas, saturation, U/W cutting and welding, and chamber operation.



An eligible institution for student loans & grants.
(Located in the Port of Philadelphia)

DIVERS ACADEMY OF THE EASTERN SEABOARD

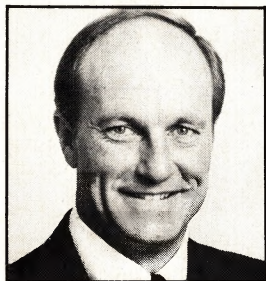
2500 So. Broadway • Camden, N.J. 08104

Call 1-800-238-DIVE in N.J. (609) 966-1871

NAME _____
ADDRESS _____
CITY _____ ST _____ ZIP _____
PHONE _____

CHISHOLM/U.S. DIVERS

Larry "Chis" Chisholm, well-known in the sailboat manufacturing industry, has joined U.S. Divers as national sales man-



ager for Aqua-Lung products. Chisholm replaces Frank Scalli who recently retired. Based at U.S.D. Corp. headquarters in Santa Ana, California, Chisholm reports to Mike Chapman, U.S.D. executive vice president.

Chisholm was previously director of sales and marketing at Hobie Cat, where he worked closely with the boat building company's founder, Hobie Alter. Chisholm spent about ten years with Hobie Cat, first as a boat dealer in Gainesville, Florida and later as a sales executive, helping to transform the company from a fledgling business to a multi-million dollar manufacturing concern. >#

SPEEDLIGHT BATTERY TRAY

Nikon Inc. has made a modification to its SB-102 TTL Speedlight. The modification is a new and improved battery tray that features mobile contacts. It will not allow the unit to operate unless the batteries are inserted in the correct direction.

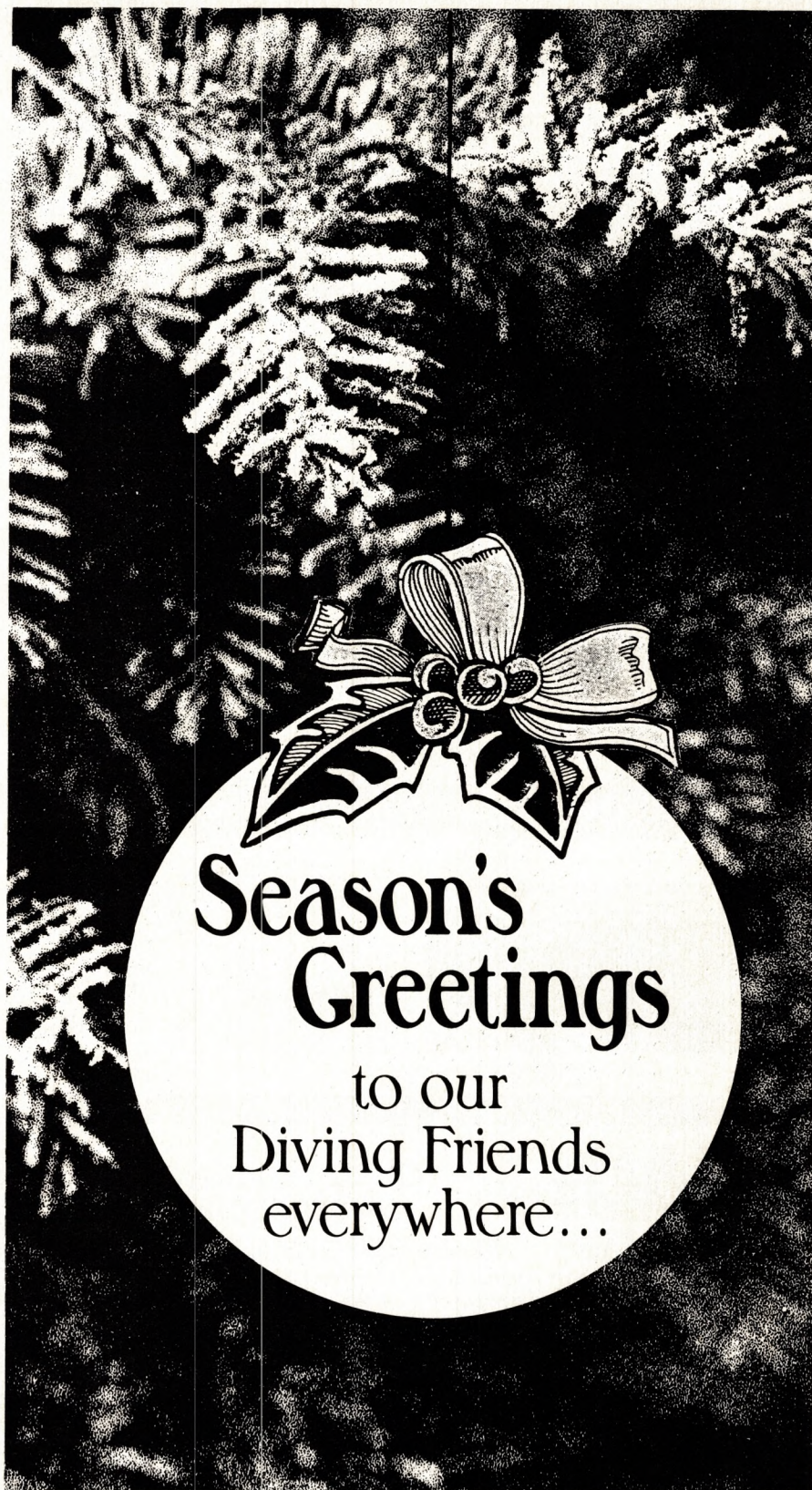
This improvement is being offered to all SB-102 owners free of charge from Nikon Inc. If you have not already received your modified unit directly from Nikon, you may obtain one by contacting: Nikon Customer Communications, 623 Stewart Avenue, Garden City, New York 11530; (516) 222-0200. >#

DIVER'S COOKBOOK NEEDS RECIPES

The Diver's Cookbook is nearing completion. Being compiled by the husband/wife team of Michael and Annie Clayville, the cookbook will be an exhaustive collection of the favorite saltwater/freshwater recipes of divers across America.

Any diver who submits one or more acceptable recipes for the new cookbook will receive credit for his/her contribution. Divers' names, cities, and states will be printed in the book, along with their recipe(s). Each diver who submits a usable recipe will be given an opportunity to obtain the finished cookbook at cost.

The Diver's Cookbook is scheduled for completion in early 1986. Send neatly handwritten or typed recipes, along with name, address and phone number to: *The Diver's Cookbook*, 13252 Verdura Avenue, Downey, CA 90242. >#



...from the finest Dive Stores
and Instructors in the world.

PADI®

1243 East Warner Avenue • Santa Ana, CA 92705

circle #131 on Reader Service Card

THE PERFECT DREAM

Custom design ...
Free custom fit ... Choose from ours or create your own ...

Visit our store or shop by mail ... Send for new 1986 catalogue, measurement chart and ordering information ...



COBRA
WETSUITS

3013 OCEAN PARK BLVD • SANTA MONICA, CA 90405 • 213-452-6386

circle #132 on Reader Service Card

Pisces Books
Books for divers on travel, marine life, training, and more. Available at your local Dive Shop.
Write for FREE full-color catalog.
Box 678, Locust Valley, NY 11560

circle #133 on Reader Service Card



AQUA VIDEO PRODUCTIONS presents a narrated Full Color U/W video tape of the HAWAIIAN ISLANDS. Featuring Marine Life, Cave and Night Diving For Only \$29.95 plus \$1.50 postage + handling. For your VHS or BETA UNDERWATER VIDEO TAPE and GUIDE TO THE ISLANDS. Send Check or M.O. to AQUA VIDEO PRODUCTIONS, 431-C Kawaiolo Rd., Kailua, Hawaii 96734 (808) 261-9413.

circle #134 on Reader Service Card

NAUI COLLEGE

YOUR ASSURANCE OF PERSONAL PROFESSIONAL TRAINING

Whether you desire a full time career as a professional sport diving instructor or want to develop your advanced level skills ... consider NAUI College.

- A maximum student / teacher ratio of 6:1
- A supportive staff of professional educators led by Jim Hicks, one of the industry's top minds
- Free full-time placement assistance and business consultation for graduates
- An esteemed roster of alumni worldwide

If you are looking for an intelligent and straightforward approach, call collect or send for information.

Please send me your brochure

Name _____

Address _____

City _____ State _____ Zip _____

NATIONAL ASSOCIATION
OF UNDERWATER
INSTRUCTORS COLLEGE
27402 Camino Capistrano,
Suite 103
Laguna Niguel, CA 92677
714/582-0186

All courses approved by the Superintendent of Education.

circle #135 on Reader Service Card

INDEX

(Continued from Page 16)

DIVING MEDICINE—MEDICAL TERMS, pg. 9, Aug.
DIVING PHYSICS—DEFINITIONS, pg. 11, Sept.
PHYSICS—HUMIDITY, pg. 11, Oct.
EQUIPMENT—WETSUITS, pg. 11, Nov.
MULTI-LEVEL DIVING, pg. 9, Dec.

SCUBA TRAINING

PADI INSTRUCTOR COURSES by Harry Averill, pg. 20, Jan.
GONE DOWN LATELY? by G.A. Brandt, pg. 54, Apr.
FLORIDA INSTITUTE OF TECHNOLOGY by Steve Lucas, pg. 62, Apr.
SO YOU WANT TO BE A DIVE INSTRUCTOR? by Paul Howe, pg. 84, Aug.

TECHNIFACTS by E.R. Cross

HAZARDOUS MARINE ANIMALS, pg. 52, Feb.
RIVERS, DAMS, DIVERS, pg. 57, Mar.
MORE DAM DIVING, pg. 16, Apr.
GHOST FOREST OF CLEAR LAKE, EARLY FILMS, pg. 56, May
HAWAII BARGE SALVAGE, pg. 42, June
ARCHAEOLOGY BEHIND DAMS, pg. 22, July
MORE U/W ARCHAEOLOGY, CNIDARIA, BOOKS, DAMS, pg. 21, Aug.
DIVER LABELS, pg. 18, Sept.
SALVAGE OF THE CAROLYN K, pg. 18, Oct.
HAWAIIAN HARBOR FOLLOWUP, GAS HAZARDS, NDT, pg. 34, Nov.
OLD DIVING FILMS, pg. 18, Dec.

TREASURE DIVING

ATOCHA TREASURE FOUND by Steve Lucas, pg. 28, Oct.
METAL DETECTING UNDERWATER by James Hulsizer, pg. 70, Nov.

WRECK DIVING

U.S.S. COLUMBINE by Howard B. Tower, pg. 54, Jan.
U.S.S. KOKA by Bonnie J. Cardone and Steve Giles, pg. 62, Jan.
POOR MAN'S GOLD by Richard Triebe, pg. 98, Jan.
THE PROTEUS by Rod Farb, pg. 110, Jan.
MUNISING MICHIGAN WRECKS by Bruce Hootman, pg. 121, Jan.
U-853 by George P. Sharrard, pg. 114, Feb.
IMAGES OF SUNKEN SHIPS by Mark Kidd, pg. 122, Feb.
THE GOODRICH JINX SHIP by Richard Triebe, pg. 105, Mar.
THE TARPON by Rod Farb, pg. 122, Mar.
ARTIFACT PRESERVATION by Ric Murphy, pg. 97, Apr.
SAGA OF THE RATTLESNAKE by Howard B. Tower, Jr., pg. 124, Apr.
EMPIRE MICA by Karl W. Shreeves, pg. 42, May
THE U-85 by William H. Hughes, pg. 56, June
THE BARQUE ARABIA by Dan Orr, pg. 128, June
SAGA OF THE BYRON D. BENSON by William H. Hughes, pg. 146, June
STEAMER OREGON by Jeffery Kassner, pg. 54, July
PAUL REVERE'S LOST SILVER by Howard M. Duffy, pg. 110, July
BRASSOHLICIS by Peter Jensen, pg. 114, July
THE RELUCTANT PRINCS by Richard Triebe, pg. 52, Aug.
THE STOLT DEGALI by Herb Segars, pg. 87, Aug.
THE DIVER'S EYE by Brian J. Skerry, pg. 98, Sept.
THE GENERAL BUTLER by Russ Bellico, pg. 100, Sept.
STEAMER WETMORE by Jim Kozmic, pg. 110, Sept.
LET'S DIVE THE AIRPLANE by Dick Dresie, pg. 76, Oct.
A WRECK DIVING ODYSSEY by Thomas P. O'Connor, pg. 94, Nov.
TREASURE FROM THE ANDREA DORIA by Bill Gleason, pg. 30, Dec.
THE TITANIC by Ellsworth Boyd, pg. 50, Dec.
MERCEDES I by Geri Murphy, pg. 86, Dec.
R. P. RESOR by Steve Gatto, pg. 104, Dec.

WRECK FACTS by Ellsworth Boyd

CONVICT SHIP SUCCESS, SUNKEN CITY, BOOKS, pg. 14, Jan.
WRECK LEGISLATION DEFEATED, pg. 12, Feb.
HORSE POWERED BOAT, TRIANGLE WRECKS, SUB PUB., pg. 14, Mar.
PRINZ EUGEN, PEARL HARBOR MESSAGE, N. CALIF. WRECKS, pg. 14, Apr.
H.R. 25, BOOKS, pg. 14, May
MERCEDES, JAVA WRECK, SO. FL. WRECKS, SCUBA SCOUTS, pg. 14, June
HMS PANDORA, ARIZONA INSPECTION, pg. 12, July
S676 PROTEST, CHEROKEE, SCORPION, pg. 12, Aug.
U/W NEW YORK SHOW, CADIZ WRECKS, pg. 14, Sept.
CAPTAIN KIDD, CITY OF VERACRUZ, pg. 14, Oct.
S.S. MICHIGAN, COURSE 085 TO ETERNITY, EMPIRE MICA, pg. 14, Nov.
SYMPOSIUM UPDATE, pg. 12, Dec.

BONAIRE MANTA FREED

Divers staying at the Carib Inn, Bonaire were treated to a little extra excitement and a great deal of satisfaction on one of their dives recently when a manta ray was spotted at Rappel, one of Bonaire's most popular sites. The ray had been seen a few weeks prior with rope wrapped tightly around its body. It was just by chance that the Carib Inn divers saw the manta swimming very slowly in about 70 feet of water. Bruce Bowker, owner of the Carib Inn and guide on that dive, alerted everyone and slowly they descended on the creature. It barely moved as they began to cut away the rope as carefully as possible. After only a few minutes the last piece of rope was pulled free and the manta rolled over and quickly swam off, free of the burden.

RICHARDSON ENTERPRISES

Richardson Enterprises, southeastern representative for several manufacturers of diving, sporting and active wear equipment, has a new toll free number, (800) 245-7674.

DERRICKS BECOME FLORIDA REEFS

A huge, barge-mounted crane recently lowered five sections of two former oil derricks to the ocean floor off Hallandale Beach, Florida. The sections included a drilling platform and two 50 foot tall support frames, set in 100 feet of water, and two 86 foot tall support frames, set in 200 feet. All sections were placed upright on the bottom to create artificial reefs.

The derricks, donated to the artificial reef program by Tenneco Oil Company, had been inspected by the Coast Guard to ensure they were not contaminated. The placement of the rig sections in an east-west line less than two miles offshore is expected to attract a variety of reef dwelling and pelagic fish as marine growth establishes itself on the framework.

STATEMENT OF OWNERSHIP MANAGEMENT AND CIRCULATION (Required by 39 U.S.C. 3685)

- 1a. Title of Publication: SKIN DIVER
- 1b. Publication No. 00376345
2. Date of filing: 9-23-85
3. Frequency of issue: Monthly
- 3a. Number of issues published annually: 12
- 3b. Annual subscription price: \$13.94
4. Location of known office of publication: 8490 Sunset Blvd., Los Angeles, CA 90069
5. Location of the headquarters or general business offices of the publisher: 3490 Sunset Blvd., Los Angeles, CA 90069
6. Names and addresses of publisher, editor and managing editor:
Publisher: Paul Tzimoulis, 8490 Sunset Blvd., Los Angeles, CA 90069
Editor: Bill Gleason, 8490 Sunset Blvd., Los Angeles, CA 90069
Managing Editor: Connie Johnson, 8490 Sunset Blvd., Los Angeles, CA 90069
7. Owner: Petersen Publishing Company, 8490 Sunset Blvd., Los Angeles, CA 90069; Robert E. Petersen, 8490 Sunset Blvd., Los Angeles, CA 90069
8. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: None.
9. For completion by nonprofit organizations authorized to mail at special rates (Section 423.12 DMM only): Does not apply
10. Extent and nature of circulation:

Actual
No. Copies
of
Single
Issue
Published
Nearest
to
Filing
Date

	Average No. Copies Each Issue During Preceding 12 Months	
A. Total no. copies printed.....	262,688	271,681
B. Paid and/or requested circulation:		
1. Sales through dealers and carriers, street vendors and counter sales.....	29,371	34,000
2. Mail subscription.....	178,404	173,483
C. Total paid and/or requested circulation.....	207,775	207,483
D. Free distribution by mail, carrier or other means: Samples, complimentary, and other free copies.....	6,983	3,390
E. Total distribution.....	214,758	210,873
F. Copies not distributed:		
1. Office use, left-over, unaccounted, spoiled after printing.....	7,345	6,042
2. Return from News Agents.....	40,585	54,766
G. Total.....	262,688	271,681

I certify that the statements made by me above are correct and complete.

Nigel P. Heaton
Vice President

Garrett Sea Hunter



A New Depth in Wreck Diving!

Have you ever explored a sunken shipwreck and wished you could see beyond the sand and coral covered barriers of time?

A Garrett Sea Hunter gives you the ability to uncover the secrets hidden beyond your view by detecting buried gold and silver treasures. Imagine being able to locate and

uncover old relics, coinage, and jewelry once thought to be lost in the sea forever.

Add a new depth and benefit to your next wreck dive; take Garrett along. For free information on how to get started in underwater treasure hunting, call now: **1-800-527-4011** or **1-800-442-4889** in Texas.



Garrett Metal Detectors
Dept. SD855
2814 National Dr.
Garland, Texas 75041-2397 U.S.A.
214/278-6151

circle #136 on Reader Service Card

**For honest answers
about commercial
diver training call**

—FREE

800-654-3483

in NY 800-847-8989



151-19 POWELLS COVE BLVD. □ WHITESTONE, NY 11357

circle #137 on Reader Service Card

NEW! REVOLUTIONARY! FOAM DIVE FLAG



REPS. WANTED!
NEEDS NO STIFFENER-WILL NOT FRAY
IT FLOATS—FEATHER LIGHT

"DEVELOPED IN THE FLORIDA KEYS"

Meter Size Available 6 for \$12.95
Alpha Available 12 for \$23.95
Available ONLY Through 24 for \$46.90 + \$2.75 Postage

SLC DISTRIBUTORS
P.O. Box 580 - Key Colony Beach, Florida 33051
(305) 743-0169

circle #138 on Reader Service Card

Australia The World

The Coral Sea and the Great Barrier Reef. Warm, crystal-line water. Multi-hued forests of living coral. Fish that feed from the palm of your hand.

It's Australia's Queensland coast. A place with 3,500 species of fish (1,200 of which are found only in Australia) and 1,100 species of living coral.

A place where you can wind your way through vivid coral formations. Dive a marine national park and underwater zoo that

HAYMAN ISLAND.

A full-facility resort offering the best in recreation for both divers and non-divers, Hayman Island is perfect for the entire family. In addition to a spectacular location between the Queensland coast and the Great Barrier Reef, we offer full PADI dive courses, spectacular snorkeling, and windsurfing, water skiing, paraflying, tennis, archery, three swimming pools and beautiful unblemished beaches. Along with a first-rate disco and nightly entertainment. There are a wide variety of Hayman lodgings with island dive packages to match, at prices tailored to suit most budgets. Hayman can be reached by Ansett Airlines jet via Hamilton Island, and transfer via the high-speed M.V. Sun Goddess. For the best diving and family recreation of your life, visit the Great Barrier Reef and Hayman Island. Call *Dive In Australia*, (415) 928-4480.

circle #139 on Reader Service Card

REEF EXPLORER CRUISES.

No one can show you the underwater spectacle of the Great Barrier Reef like its longest established live-aboard boat service. Our 10-passenger Auriga Bay and 12-passenger Reef Explorer offer the finest in sport diving. 5-12 day dive packages are available to individuals and groups to the famous Ribbons, the far Northern Barrier Reef, and the Coral Sea. Barry May, a pioneer of Australian dive tourism, leads the way in finding the best diving sites. For more information, call *Dive In Australia* at (415) 928-4480.

circle #141 on Reader Service Card

WATER SPORT.

This luxurious 65-ft. catamaran offers 4-10 day individual dive packages. Operated by Mike Ball Water Sports of Townsville, it's the best boat to the famous Yongala wreck and the Great Barrier Reef. Call *Dive In Australia*, (415) 928-4480.

circle #142 on Reader Service Card

QUICKSILVER DAY TRIPS. There's no better way from the Port Douglas/Cairns area to the Great Barrier Reef than aboard the "Quicksilver." Full day dive facility, also underwater observatory and Subsee Explorer. Call *Dive In Australia*, (415) 928-4480.

circle #143 on Reader Service Card

nder Down Under.

includes a 90% intact 70-year-old wreck. Then finish your day by hugging a friendly 200-pound grouper.

Speaking of friendly, there's no place that's more so than Australia. And there's no one who can show you a better diving holiday than our mates listed on these pages.

For a free copy of *The Qantas Dive In Australia Guide*, call 1-800-445-3000 and ask for Dept. SD12.

Then come and say g'day. Our greatest wonders are down under.

HERON ISLAND.

The only diving resort situated on the Great Barrier Reef offers some of the world's finest diving. We're experts when it comes to reef life. And our full dive facilities include four dive boats and over 60 rental scuba tanks. Only 26 minutes from Gladstone by helicopter, Heron is the home ground of tame moray eels, sea turtles (seasonal) and a huge variety of fish and coral. Lodging is available to fit a variety of budgets, and includes three meals and two dives per day, along with tanks, air, etc. And Heron's full facilities include day and night tennis, a cinema, swimming pool, well-stocked bar and dance band. Situated within a marine national park, Heron is perfect for close-up and macro underwater photography. You can also explore by glass-bottom boat, go for a reef walk, or go deep sea fishing. Would-be divers can learn at Heron's own certified diving school. There's no diving like the Great Barrier Reef, and no place on the Reef like Heron Island. For information and dive brochure, call (714) 786-0119.

circle #144 on Reader Service Card

AIR QUEENSLAND TO LIZARD ISLAND.

No one knows the diving playgrounds of Queensland like Air Queensland. Including secluded Lizard Island, a divers' paradise with countless beaches and accommodations for only 60 privileged guests.

For complete information on fares and travel, call (213) 381-3062 or (212) 697-3694.

circle #145 on Reader Service Card

QANTAS. THE DIVER'S AIRLINE.

L.A. or San Francisco direct to Cairns and the Great Barrier Reef for only \$996 round trip.*

circle #146 on Reader Service Card

*Based on April to November Circle-8 APEX deal. Reservations and payment required 14 days before departure. Some restrictions apply and fare is subject to change without notice.



SEA&SEA and LaserColor Offers You a Unique Opportunity



FOR A LIMITED TIME ONLY, BUY OUR

LaserColor SPECIAL

Consisting Of:

- MOTORMARINE 35 SE
- CAMERA TRAY
- FLEXIBLE ARM
- YS 50 STROBE

AND RECEIVE A CERTIFICATE FROM
SEA&SEA WHICH CAN BE REDEEMED
FOR ONE **LaserColor** ART EFFECT
11 x 14 PRINT (A \$25 Value)

SEA&SEA U.S.A., INC. 1030 W. 15th Street • Riviera Beach, Florida 33404 • (305) 844-8937

Laser Color Laboratories Fairfield Dr. • W.P.B. Florida 33407 • (305) 848-2000

circle #147 on Reader Service Card

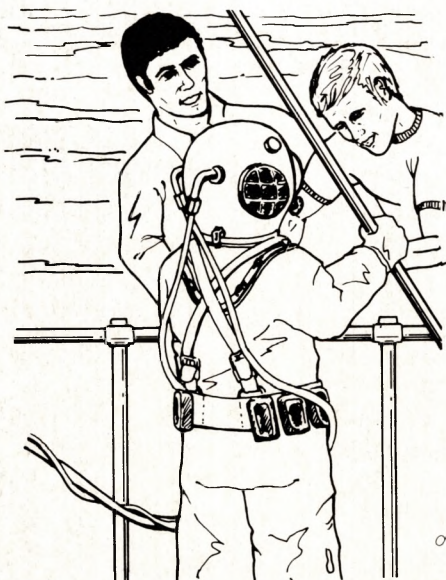
NOW

For The Lowest Total Tuition of **\$1,095** + Reg. Fee

You, Too, Can Become A Commercial Deep Sea Diver

- Coastal offers you the lowest tuition: \$1,095. Why pay more? Our graduates work at the same starting wages alongside students who paid \$4,000 to \$6,000 tuition at other schools. —COMPARE and SAVE!
- You'll train full-time: 8 hours a day, 5 days a week for *only* 11½ weeks to earn your diploma. Course is ⅓ academic, ⅔ practical.
- We teach you all 4 phases to become a well-rounded diver: salvage, research, construction, oil field.
- You'll work in 11 to 17 different types of commercial diving gear. A mixed gas dive included.

In January & April 1986 Classes only



- We are one of the few schools that teaches commercial hard hat used in salvage and construction fields.
- We stress safety. Our school has *never* had a major accident or fatality as in some other schools.
- In 36 years of operation, Coastal has trained over 8,000 American and foreign students as commercial divers.
- Join the ranks of Coastal's commercial diving graduates working worldwide. Write today for details. No obligation.

**Coastal School Of
Deep Sea Diving**
320 29th Avenue
Oakland, CA 94601
(415) 532-4211

Coastal School of Deep Sea Diving
320 29th Avenue, Oakland, CA 94601
For full details and application form,
enclose \$3 U.S. for handling and postage.

Name _____
Address _____
City _____
State _____ Zip _____

SD-125

circle #148 on Reader Service Card

BY JIM WALKER

Oceanic, of San Leandro, California, well known for its quality masks, regulators, strobes and other gear, is expanding its product line. One of the newest items is the Freedom 1 BC Jacket. The name is apt—the BC offers its user freedom in several areas:

Freedom of movement: The Freedom 1 BC is designed for a low drag profile, which offers less resistance to movement through the water. You'll expend less energy swimming. The wide open shoulders of the jacket allow complete freedom of arm movement.

Freedom from discomfort: The jacket offers a variety of adjustments for a custom fit—when set up properly you can just slip it on and forget you're wearing it. The front and back panels of the BC are joined to each other (in the area of the diver's ribs) by a wide Cordura band with sewn-on edge taping. There are nylon webbing straps on each side of the jacket that slip through plastic buckles. These can be adjusted to position the front panels as close to the back panels as desired, accommodating a wide variety of chest sizes. Two similar nylon webbing straps secure the front of the BC and tailor it to chest size. The lower of these straps weaves through a wide, padded band that encircles the diver's waist. This band closes with Velcro® and can be adjusted to accommodate a range of waist sizes. (The large Freedom 1 BC comes standard with a large waist band and the medium jacket comes with a medium band. Small and extra large bands are available as options.)

The Freedom 1 BC is sturdy. It has a 15 mil thick urethane inner bladder and a tough Cordura nylon outer cover. All seams are double sewn for strength. There are large mesh drain areas at the bottom of each panel and the inner bladder is accessed through a non-corrodible zipper. With the combination low pressure/manual inflation/deflation hose, you know operating the BC will be easy, even when you're in a hurry. And, you can't overinflate it. There's an overpressure valve on the back right panel. With the optional CO₂ cartridge, you can fill the BC even if you run out of air.

The plastic backpack connects, by means of two stainless screws, to a curved tank guide on the back of the BC. This and the tank band have rubber inserts to prevent tank slippage. The tank band is flexible nylon webbing and secures with a stainless steel snap-over buckle. There is an additional strap above the tank band that serves as a carrying handle.

The Freedom 1 BC has two huge pockets. Both have a wide expanse of mesh on the back for drainage. Both have Velcro closing top flaps and can expand outward (by an ingenious use of Velcro tabs) to accommodate large objects. The

pocket on the diver's left covers the CO₂ cartridge, yet can be easily lifted to check the cartridge's condition. The pocket on the right can be used to hold an octopus second stage and has a fluorescent orange stripe on the flap to guide a diver in need to it. There is a plastic key ring on the inside of the left pocket and plastic D-rings are attached to the BC just below each pocket. Hose guides on the left pan-

el of the BC complete the package.

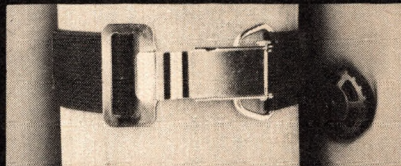
The Freedom 1 BC is available in shiny royal blue or red, with gray shoulders. Black accent panels and piping are included. It comes with a one year limited warranty and sells for \$332. Try one on at your Oceanic dealer and enjoy the freedom it offers you. For dealer information contact Oceanic, 14275 Catalina Street, San Leandro, CA 94577. 



FREEDOM 1

Oceanic's Ultra-Comfortable BC Jacket

Oceanic's Freedom 1 BC jacket is made of Cordura nylon and offers several adjustments for a comfortable fit and low drag profile. The nylon webbing tank band is secured with a stainless steel buckle. A rubber insert prevents tank slippage.



photos/Bonnie J. Cardone

THE TITANIC



Shipwreck Find of The Century

A country mouse was visiting his cousin in a large city. About to board a subway train, the country cousin was hustled to a different platform by his host. "We'll take the express instead," the city mouse said. "We'll save a minute." "Great," said the country mouse. "What'll we do with it?"

A similar paradox is evolving from the discovery of one of the greatest ships of all time—the RMS *Titanic*. A cry has already gone out: "Raise the *Titanic*!" But it's followed by still another shout: "Now we've found it, what'll we do with it?" Bring her up—some people say—and like King Midas, play with all her riches. Rumored to hold a king's ransom in jewels and gold, some of it belonging to 10 millionaires aboard the luxury liner when it sank in 1912, the wreck rests 13,000 feet deep, 500 miles east of Newfoundland.

It also entombs the bones of over 1,500 passengers and crew who were stranded aboard a brand new vessel that

failed to stock enough lifeboats. Survivors—there were 713 (21 are still living)—and relatives of survivors heartily agree that the 882 foot long, 43,628 ton wreck should be left alone, a memorial to loved ones lost in the greatest peacetime disaster at sea.

A U.S./French expedition, sponsored by the French Institute of Research, Woods Hole Oceanographic Institution and the National Geographic Society, worked from the U.S. Navy survey ship, RV *Knorr*. The crew began its search, narrowed down beforehand by a French vessel, *Le Suroit*, August 5 and found the *Titanic* on September 1, using a French-made SAR submarine sonar system and American-made Argo U/W cameras.

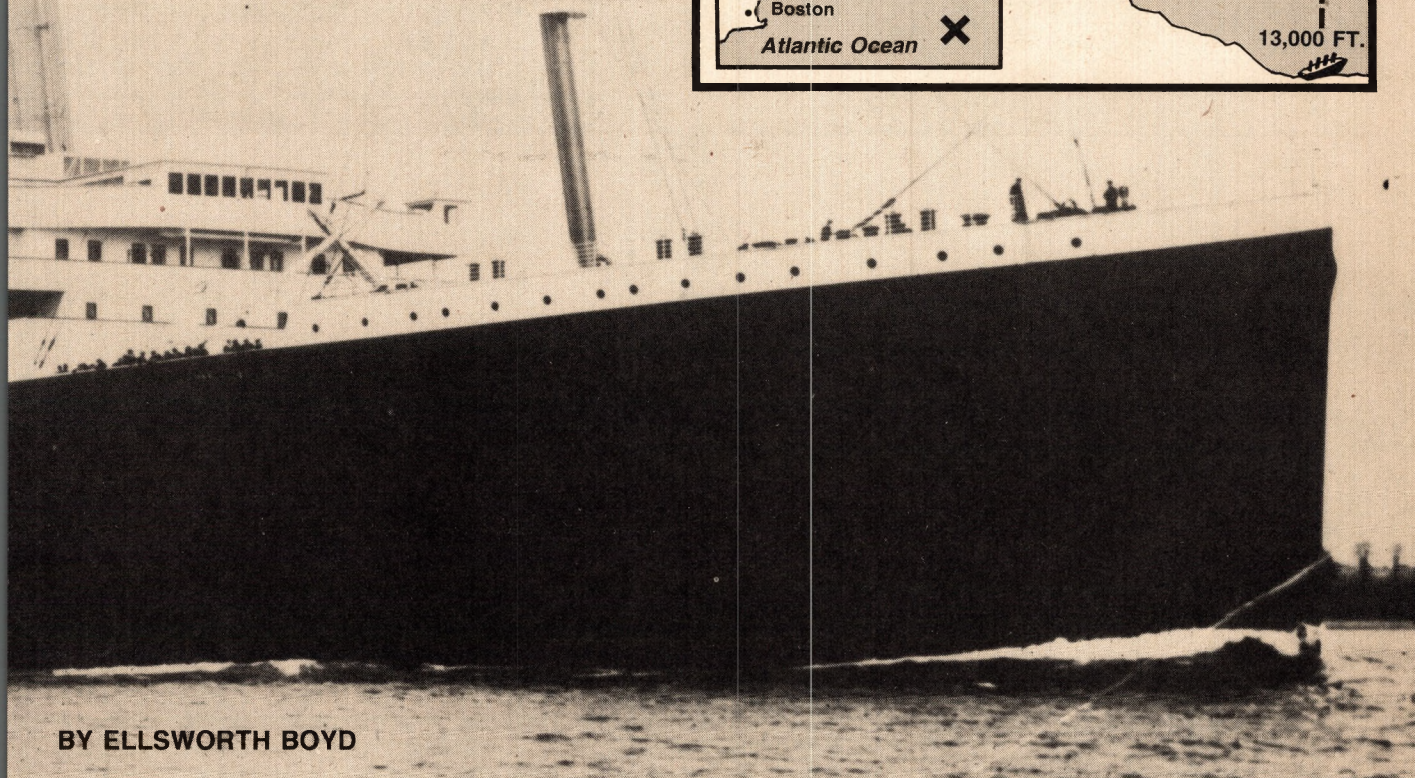
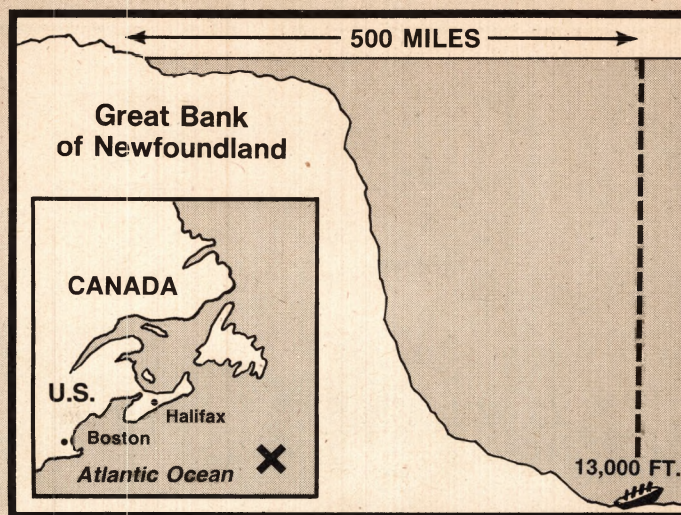
Expedition leader, Dr. Robert Ballard, Woods Hole Oceanographic Institution, Cape Cod, Massachusetts, described the remote-control television survey made of the 73 year old wreck.

"The *Titanic* sits upright on the bottom,

its bow facing north with two of its four majestic stacks pointing upward. It's in an area of geologic upheavals—immense sand dunes that look like the Sahara Desert. The number one forward stack is on the bottom with sediment and growth on it. The stern is broken off, lying in pieces near the rest of the ship. The wreck resembles a ghost ship sailing in a graveyard two and one-half miles deep. It looks like a museum piece in superb condition. Our Argo robot lights and cameras videotaped gaping holes in the *Titanic*'s hull and boilers; winches, cranes, wine bottles, luggage and a silver tray strewn around the wreck."

Ballard said he is glad it's all over. He was at sea many months constantly tracking, testing and analyzing the ocean bottom before narrowing the search pattern. The main objective of the expedition was to test the Argo and Ballard thought looking for the *Titanic* would be the ideal way to do it. Thirteen thousand feet was

The gigantic luxury liner RMS *Titanic* sank in 1912, after a collision with an iceberg. The tales of tragedy and heroism, and the mysteries surrounding the sinking, have made the *Titanic* the most famous of all shipwrecks. After the ship sank it wasn't found for 73 years. A joint U.S./French expedition located her remains on September 1 this year in 13,000 feet of water 500 miles off the coast of Newfoundland.



BY ELLSWORTH BOYD

photo/courtesy Steamship Historical Society Collection, University of Baltimore Library

sort of duck soup for the eight foot long, three foot wide Argo that can "see" much deeper using a sophisticated system of cameras, sonar and TV. Ironically, a new French remote acoustic system (SAR) narrowed the search considerably, but the big hit was made by an ordinary 25 year old piece of sonar equipment aboard the *Knorr*.

Ballard added, "There is no light at this great depth where the *Titanic* sits and very little sea life can be detected. It's quiet and peaceful down there, a fitting place for the remains of such a tragedy. May it stay that way forever . . ." Ballard said any attempts to salvage the wreck would be "ridiculous" and proposed to make it a marine memorial.

Remote equipment would have to be used if any attempts were made to raise the *Titanic* where depths create a pressure of 6,000 pounds per square inch. There is no existing mechanical equipment capable of lifting a vessel of such

massive proportions to the surface from a depth of 13,000 feet.

Clive Cussler, author of the novel, *Raise the Titanic*, said, "When my book was published in 1977, I estimated a cost of \$2 billion to raise the vessel. Today it would cost \$3 to \$4 billion. If nobody was willing to spend the money necessary to raise the *Lusitania* or the *Andrea Doria*—both about 250 feet deep—they won't be retrieving a ship from 13,000 feet.

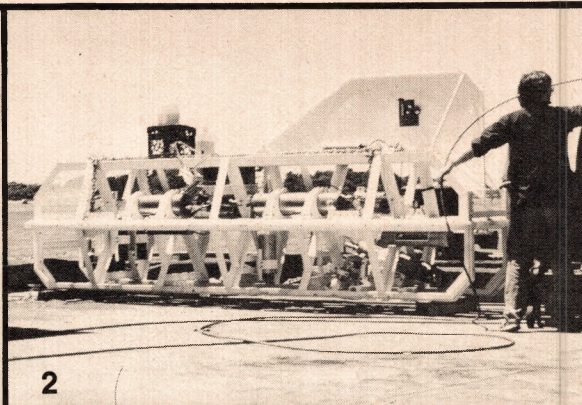
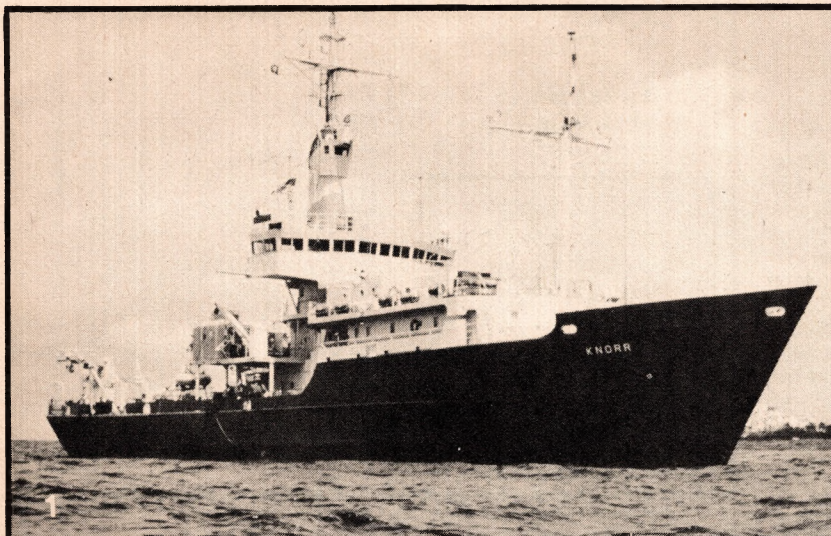
"You would need a king's ransom in order to offset the cost of raising such a wreck. Some say the ship's safe contains a fortune in jewels, but my research leads me to believe this isn't true. Passengers included 10 millionaires and many socialites, but the only loss of any magnitude was recorded by a woman who left \$250,000 worth of jewelry behind. People aboard the *Titanic* weren't stupid. The ship remained afloat nearly three hours, plenty of time for passengers to pick up their jewelry before the vessel sank. Ru-

mors say there was gold aboard, but none was listed on the ship's manifest."

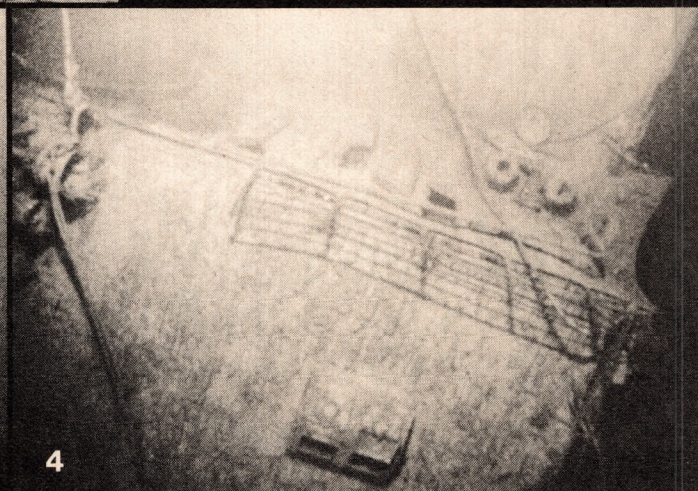
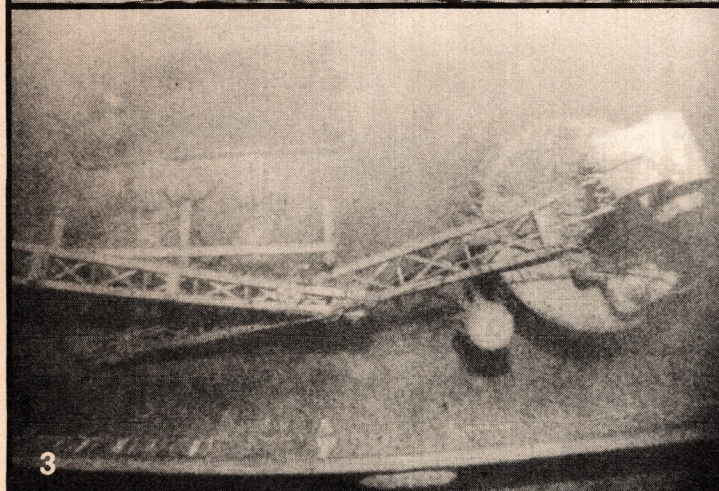
On the other hand, Abilene, Texas oil baron, Jack Grimm has led three expeditions in search of the fancy flagship of the White Star Line nicknamed The Millionaires' Special. In 1981 his expedition returned with what Grimm said appeared to show a ship's propeller. Another expedition picked up sonar images of what might have been a large shipwreck. Grimm now considers the U.S./French find a confirmation of his discovery.

"We have the rights to the *Titanic*," Grimm says, "because we gave them the benefit of all our information about where the ship is. They have no claim to it."

The millionaire's original intention was to commission the *Aluminaut*, a 51 foot long deep-diving submersible, owned by Reynolds Metals, to dive on the wreck. The *Aluminaut* is the world's largest privately owned submersible with nine foot long exterior arms that can probe inside



1 The *Titanic* discovery expedition worked from the U.S. Navy survey ship, R/V *Knorr*.
2 The remotely operated *Argo* carried video cameras 13,000 feet down to the wreckage.



a sunken ship to retrieve artifacts. Its use is still a possibility.

"We'll probably dive the wreck and salvage what we can," Grimm said. President of Grimm Oil Company, the 58 year old adventurer scoffs at the suggestion he is just a rich Texan with an expensive hobby. "This is a business venture, just like wildcatting for oil," he said. If Grimm acquires rights to the *Titanic*, he will attempt to locate the purser's office and either verify or disclaim the \$200 million worth of jewels and precious metals rumored to be in the ship's safe.

None of the 21 present day survivors know for sure what took place in the purser's office because most were babies or young children when the *Titanic* slipped beneath the sea at 2:20 am, April 15, 1912. The ship struck an iceberg 100 feet high that appeared like an apparition from out of nowhere on a moonless night, April 14. Plowing along at 26 miles an hour, the *Titanic* veered to port when lookouts in the crow's nest spotted the lethal mass of ice looming out of the darkness. The impact was little more than a shudder, hardly felt on the upper decks. But the brief encounter tore a gash in the

starboard bow 300 feet long, 10 feet above the level of the keel.

Captain Edward J. Smith, who went down with his ship, ordered an SOS and CQD (Come Quickly, Disaster) over the radio. Approximately ten miles away, the *Californian* of the Leyland Line was hove to in an ice pack. Her captain, Stanley Lord, halted his ship because of fog and dangerous icefields. The radioman was asleep and had shut down his wireless for the night. A deckhand on watch said he saw a white rocket in the sky and sent word to the captain who was asleep in his cabin. But the captain took no action, not realizing it was a ship in distress.

The Cunard liner, *Carpathia*, 58 nautical miles southeast of the radio distress signal position, changed heading and steamed full speed to the tragic scene to pick up lifeboat survivors. By the time the *Carpathia* arrived, the *Titanic* was resting in her deep water grave.

The very thought of the *Titanic* in danger of foundering was preposterous because she was proclaimed to be unsinkable. She had a double thick steel armored hull and was divided from prow to stern into 16 watertight compartments.

But, water gushed through the gash in the bow faster than it could be pumped out. Six of the 16 compartments filled quickly with sea water. The transverse bulkheads that divided the ship into separate "watertight" compartments only reached the deckheads. As soon as the gushing water reached that level, it would—like water overflowing a bathtub—splash over the edge into the next compartment.

Like a bee stinging a weeping face, one misfortune following another, a chain reaction dethroned the "queen of the ocean." The bow filled with icy waters of the North Atlantic, the ship listed and engines stopped. But the engines, still full of steam, hissed a roar into the frigid night so loud that passengers could barely hear instructions to abandon ship. Although she carried more than 2,200 passengers and crew, the palatial liner with 11 decks and four funnels—each large enough to drive a locomotive through—carried only 20 lifeboats. Women and children were first as the lifeboats were lowered from the mother ship.

Most of the 1,500 passengers remaining aboard were cognizant of their fate. At 2:05 am, 15 minutes before the ship



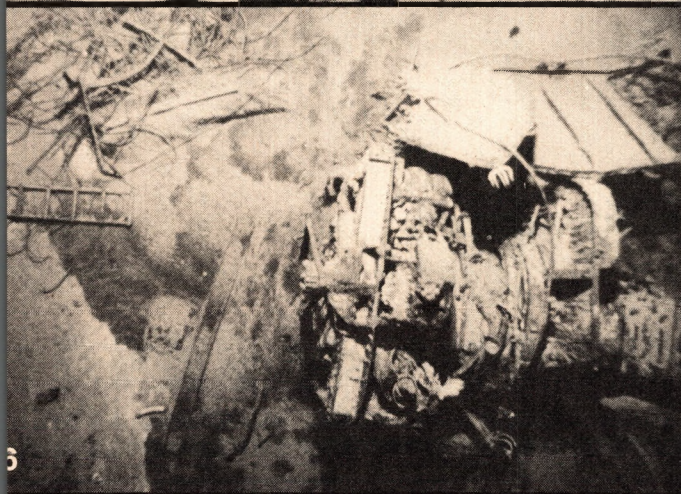
3 The *Titanic*'s deck cranes lie broken and fallen, never to hoist cargo aboard ship again.

4 The crew's quarters below the forward deck.

5 The members of the *Titanic* expedition, from left: Jean Louis Michel; Lt. George Rey, U.S. Navy; Jean Jarry; Dr. Robert D. Ballard; Bernard Pillaud. The search was sponsored by the French Institute of Research, Woods Hole Oceanographic Institution and the National Geographic Society.

6 The base of the *Titanic*'s after crane lies in a field of debris. Despite the disorder, the wreck is considered to be in superb condition.

7 A silver platter and lumps of coal litter the bottom near the *Titanic*, evidence of the ship's descent of more than two miles from the surface.



photos/Woods Hole Oceanographic Institution

sank, a small band was still playing on deck. Thomas Andrews, designer and builder of the *Titanic*, helped direct passengers to the lifeboats and remained aboard Britain's symbol of strength—its monument to industrial progress.

As the forecastle head went underwater, the bow dipped deep, forcing passengers to run aft to escape the sea. When the stern swung skyward, a wave surged up the deck gathering everyone in its wake. Everything aboard ship that wasn't bolted down tumbled toward the bow. Boilers broke free and crashed through the hull like giant bowling balls knocking down everything in their paths. High out of the water, the stern revealed three mighty propellers that had been driven by the ship's three engines only a few hours earlier. The titan of the White Star Line stood straight up in the air like a soldier at attention—then went straight to the bottom of the North Atlantic.

Many heartrending and heroic stories evolved from what some historians call the "world's most sensational catastrophe." John Jacob Astor, New York real estate tycoon, bade goodbye to his wife and remained behind. A poor girl from

Colorado was credited with saving everybody in her lifeboat as she took charge of the bewildered women and children. She was later dubbed, "the unsinkable Molly Brown." A German woman in a lifeboat was hysterical because she had been separated from her six week old baby who was wrapped in blankets and old clothes. She was afraid somebody would throw the bundle overboard because extra belongings were not allowed in the boats. The mother was reunited with her baby aboard the *Carpathia*. But she had been right—somebody was ready to toss the bundle overboard, but stopped when the crying of a baby was heard. A big black Newfoundland dog named Rigel saved a lifeboat from being rammed by the rescue ship. People in the lifeboat were too exhausted to cry out when they drifted dangerously close to the *Carpathia*'s starboard bow. Rigel, swimming in the icy waters, barked a warning, attracting the attention of the captain and crew. All were rescued, including the dog.

Eighty year old Eva Hart, only seven at the time, vividly remembers the tragedy: "My mother had a premonition of disaster from the moment we set foot aboard

ship. As a result of this constant worry, she sat up every night and slept in the daytime. If my mother had been sleeping that terrible night, as my father and I and most other people were, I doubt that I would be here today. My mother awakened us and we were some of the first to arrive topside. Mom climbed into a lifeboat and Dad handed me to her and said, "Now be a good girl and take care of Mummy." I knew, young as I was, that I would never see him again."

Eva Hart feels that her father's grave should be left undisturbed, a memorial to the human sacrifice and anguish of this incredible ordeal at sea. Officials at Woods Hole say they have no plans to salvage the *Titanic*. Dr. Ballard says he plans to go back and inspect the wreckage next summer in the manned submersible, *Alvin*.

A U.S. Navy spokesman at the Pentagon says Argo is part of a \$2.8 million research and development project at Woods Hole funded by the Navy. He says any kind of ocean exploration equipment aids submarine technology. A companion robot named Jason is being tested and is

(Continued on Page 118)



THE NIKONOS 15MM

The Finest Underwater Lens Ever Made

TEXT AND PHOTOGRAPHY BY GERI MURPHY

The Nikonos 15mm is perhaps the finest underwater lens ever made and certainly the finest produced for the Nikonos V. It is a lens of superb performance, producing wire sharp images with spectacular depth of field.

The 15mm allows underwater photographers to shoot amazing pictures in situations where no other lens would work. It can focus from infinity down to a distance of less than one foot; enhance the color saturation of normally bland situations; or capture the massive dimensions of an entire shipwreck.

The Nikonos 15mm is often regarded as the lens of the pros, as its cost is significantly more than the camera it fits. Yet this lens is certainly not limited to use by an elite circle of professionals. In many situations the Nikonos 15mm represents the ideal choice for beginning underwater photographers. It is a lens that is easy to use, produces breathtaking results and is very forgiving in the hands of a novice. For those who can afford it, the Nikonos

15mm should be the lens of first choice, not the last.

HISTORY

The Nikonos 15mm was introduced in 1972. Needless to say, it was a smash hit from the very start and every pro immediately purchased one. Its popularity never diminished and it was frequently in short supply over the ensuing decade.

In 1983, Nikon introduced a new version of the Nikonos 15mm. It was designed to fit the new Nikonos IV-A automatic exposure camera. The new version sported a shortened rear lens mount that would not interfere with the automatic exposure light sensors mounted inside the camera's lens well.

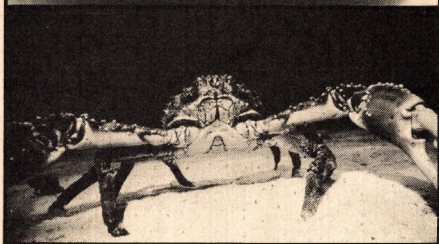
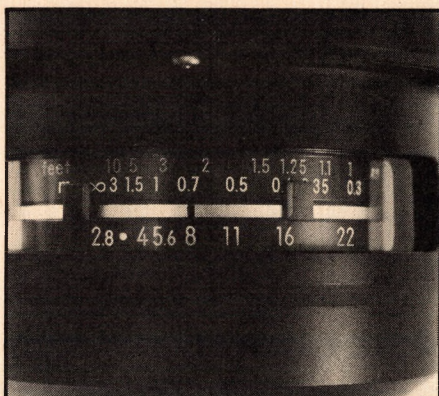
Today, three years later, that same version is being utilized successfully with the Nikonos V, working splendidly with the TTL automatic flash system.

BASIC DESIGN

The 15mm lens is undoubtedly the most impressive of all Nikonos lenses. It is larger, heavier and more sophisticated than any of its little brothers. The lens is constructed of a finely machined aluminum barrel, front and rear flanges, dome protector and other metal parts. The entire assembly is carefully screwed together with great precision.

The front of the lens consists of an optical grade glass dome that interfaces with the water. Behind it is a complex assembly of 12 precision ground lens elements fashioned into 9 groups. This sophisticated lens design allows the Nikonos 15mm to be focused down to a minimum distance of 12 inches.

Two aluminum control knobs on the left side of the lens allow quick adjustment of both the focus and aperture settings. A three and one-half inch long viewing window on the right side of the lens barrel provides the user with a clear picture of the focus scale, the aperture scale and



Opposite page: Diver and grouper photographed with Nikonos 15mm at 1.5 feet, f/11. Top: Large view window on right side of lens barrel. Above: Crab photographed from ten inches, f/22.

tings of one-third or one-quarter f/stop in the range between f/8 and f/22.

The depth of field indicator, also in the viewing window, is an ingenious device that allows quick calculation of focus range for any f/stop at any given distance. It is virtually a mechanical calculator that provides the user with instant reference information.

NEW VS. OLD

I found it interesting to compare the new version of the 15mm lens with its ancestor. The most noticeable differences are the size and weight of the new version. It is definitely larger and bulkier than the earlier model, since the entire lens assembly had to be repositioned outside the camera body. The new version is 50 percent heavier than the older model, weighing in at 640 grams.

Another very noticeable aspect of the new version is its short rear lens mount. It penetrates the camera body by barely one-quarter inch while the old model penetrated the camera by a full one inch. This 75 percent shorter mount allows full use of the Nikonos V's automatic exposure system and automatic TTL flash function. Incidentally, both 15mm lenses will fit all

scene before snapping the shutter.

A significant advantage of the new version is price: It costs 30 percent less than the older version. The new Nikonos 15mm retails for \$1,150 (compared to the old version at \$1,360) and the new viewfinder is selling for \$230 (as compared to \$346). One item that has not come down in price is the front lens cap, it sells for \$29.

CONCLUSION

In testing the new version of the Nikonos 15mm lens I was once again reminded of the remarkable advantages and benefits this lens offers. The ultra wide angle of coverage is truly impressive. This lens covers a picture angle of 94 degrees, more than twice that of the standard 35mm lens. It allows the user to photograph giant objects such as shipwrecks, U/W habitats, whales, manta rays or expansive coral reefs. No other lens does it as well. The pictures are undistorted and crisply sharp.

This ultra wide angle advantage is particularly helpful for divers who must work in turbid waters. It allows the user to get close to the subject and still get all the details into the picture frame.

NIKONOS 15MM LENS First Version

Focal Length.....	15mm
Picture Angle.....	94 degrees
Aperture Range.....	f/2.8-f/22
Focusing Scale.....	1 ft.—infinity
Dimensions.....	90mm (diameter), 79.5mm (length)
Lens Cap.....	84mm
Lens Construction.....	9 elements, 5 groups
Weight.....	415 grams
Lens Cost.....	\$1,359.50
Viewfinder Cost.....	\$345.50
Viewfinder Range.....	90% of picture
Vintage.....	1972—1982

New Version

15mm
94 degrees
f/2.8-f/22
1 ft.—infinity
93mm,
90.6mm
87mm
12 elements,
9 groups
640 grams
\$1,150.00
\$230.00
110% of picture
1983—present



This sunlight/strobe fill photo of a diver and porcupinefish shows the capabilities of the 15mm. Everything from the fish to the diver's fins is in focus.

the depth of field indicator. All settings can be checked in one glance.

The focus range of the Nikonos 15mm runs from infinity to one foot. The distance scale actually goes to 0.7 foot (8.4 inches), which is the full depth of field focus at an aperture setting of f/22. The user can focus closer with this lens than any other Nikonos lens. The focus scale is marked off in both feet (for Americans) and meters (for the rest of the world).

The aperture range extends from f/2.8 (wide open) to f/22 (fully stopped down). There are positive click stops at f/2.8, f/4, f/5.6, f/8, f/11, f/16 and f/22. The expanded scale on the side of the lens barrel allows really finite adjustment of set-

Nikonos cameras, but the older version will not work in the automatic mode with the IV or V.

One item that is not quite so noticeable is the slightly larger (3mm) front lens cap. The old version uses a 84mm threaded cap while the new version is 87mm. The two are not interchangeable.

Perhaps the best news is that the new 15mm lens is slightly better than the older version. The improved optics and redesigned lens elements help produce sharper pictures with slightly less distortion at wide open apertures. Also, the new viewfinder provides a much wider picture view than the older version. The user now gets to see 110 percent of the

Another magnificent aspect of the Nikonos 15mm is its splendid depth of field. At an average aperture setting of f/5.6 everything in the picture is sharp from two feet to infinity. It is hard to get an out-of-focus picture! The Nikonos 15mm is particularly useful for action shots and setups where a forced perspective technique is being employed.

Whether you are a beginner or an old pro, the Nikonos 15mm lens is an absolute must for the Nikonos bag of tricks.

For more information, see your authorized Nikonos dive store dealer or write to: Customer Communications, Nikon Inc., 623 Stewart Avenue, Garden City, NY 11530. ➤

Diving News From Down Under

Day Trips To The Great Barrier Reef

TEXT AND PHOTOGRAPHY BY GERI MURPHY

American divers visiting Australia are sometimes confused and frustrated over the location and access to the fabled Great Barrier Reef. This giant chain of coral reef formations is 40 to 50 miles off the Australian coast and is an average of 10 miles wide.

Diving conditions inside the Great Barrier Reef are generally murky and only the very outside edge is clear. This outside edge can only be dived from live-aboard dive boats or day cruisers operating from island resorts (Lizard, Heron, Hayman) on the Great Barrier Reef.

Up until now, reaching the outer edge has been impossible for brief excursions. However, this situation has changed and now visitors can dive this area on a day trip or brief overnight stay.

The *Quicksilver* is a new high speed catamaran that virtually flies over the Great Barrier Reef at a speed of 26 knots. Operating out of Port Douglas, this Barrier Reef launch offers daily trips to one of the most beautiful coral garden areas on the northern Great Barrier Reef.

Port Douglas is a small seaport town approximately 35 miles north of Cairns. It is less than one hour by car or you can ride in an air-conditioned bus.

Quicksilver departs each morning at 10:30 am for a 90 minute ride to its special Barrier Reef location. Morning and afternoon tea (snacks) are served during the cruise and guests enjoy a three hour stay at the reef, including a tropical smorgasbord lunch. The cruiser returns to port at 4:30 pm.

Quicksilver is a double-deck, all metal catamaran with the most modern guest facilities, including a freshwater shower, galley, sundeck and licensed bar.

The *Quicksilver* travels 45 miles NNE from Port Douglas to Agincourt Reef, rated by marine biology experts as one of the most spectacular coral reef sections of the Great Barrier Reef. Midway between Cairns and the beginning of the world renowned Ribbon Reefs, it offers maximum visibility.

At Agincourt, the *Quicksilver* moors in a calm, clear lagoon where it rendezvous with both a dive boat and a coral reef sightseeing vessel. Non-divers board the



Top: The M/V Challenger is a diver's hotel, anchored at Agincourt Reef on the outer edge of the Great Barrier Reef. Thus, divers have the option of day trips to the area aboard the swift *Quicksilver* or can stay overnight after transferring from *Quicksilver* to *Challenger*. Giant clams are common along the Great Barrier Reef.

Subsee Explorer for a semi-submersible cruise among the coral reef formations. Divers board a 33 foot pontoon dive boat, completely equipped with scuba tanks, dive gear and underwater camera rentals. The boat is a certified PADI facility under the supervision of divemaster Kerry Eckersley. The vessel can accommodate up to 20 and provides two tanks per day for certified divers.

For visitors who wish to spend more time on the Great Barrier Reef, a recent addition has been made to the Agincourt Reef operation. The MV *Challenger*, a 22 berth divers' hotel at sea, is now permanently moored at Agincourt.

Guests can transfer from the *Quicksilver* to the *Challenger* for an overnight

stay and continuation of their diving activities. Guests are offered night dives in such places as The Nursery, a bommie in 50 feet of water. It is home to a resident school of juvenile barracuda, plus a variety of turtles, reef tropicals, colorful soft corals and unusual hard corals. Underwater lights and cameras are available, along with a complete selection of rental dive gear. The *Challenger* offers an opportunity for unlimited diving plus three meals a day.

For more information and prices on the *Quicksilver* and *Challenger* dive packages, contact Dive In Australia, 680 Beach Street, Suite 340, Wharfside, San Francisco, California 94109; telephone (415) 928-4480. 🐠

HALF PRICE

12 issues only \$6.97—that's half the regular subscription price of \$13.94.

NEW SUBSCRIBERS ONLY!

☐ Payment enclosed. ☐ Bill me (U.S. only)

Name (please print) _____

Address _____

City _____

State _____ Zip _____

Rates good in U.S. Elsewhere add \$8 (U.S. funds). Allow 4-8 weeks for receipt of first issue. IHS8/sd

- ☐ **Scuba techniques**
- ☐ **Underwater photography**
- ☐ **New products**
- ☐ **Travel and recreation**
- ☐ **Only in *skindiver***
- ☐ **YES!**

I'll take 12 issues of SKIN DIVER for half price (only \$6.97)!

NEW SUBSCRIBERS ONLY!

☐ Payment enclosed ☐ Bill me (U.S. only)

Name (please print) _____

Address _____

City _____

State _____ Zip _____

Rates good in U.S. Elsewhere add \$8 (U.S. funds). Allow 4-8 weeks for receipt of first issue. IHS8/sd



NEW SUBSCRIBERS ONLY!

☐ Payment enclosed ☐ Bill me (U.S. funds)

IHS8/sd

Name (please print) _____

Address _____

City _____ State _____ Zip _____

Rates good in U.S. Elsewhere add \$8 (U.S. funds). Allow 4-8 weeks for receipt of first issue.

**BUSINESS REPLY MAIL**

FIRST CLASS MAIL PERMIT NO. 23911 LOS ANGELES, CA

POSTAGE WILL BE PAID BY ADDRESSEE

skindiver

6725 Sunset Blvd.
P.O. Box 3295
Los Angeles, CA 90078

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

**BUSINESS REPLY MAIL**

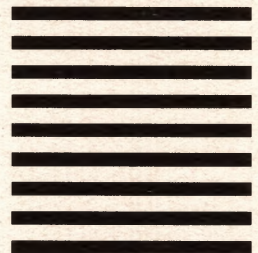
FIRST CLASS MAIL PERMIT NO. 23911 LOS ANGELES, CA

POSTAGE WILL BE PAID BY ADDRESSEE

skindiver

6725 Sunset Blvd.
P.O. Box 3295
Los Angeles, CA 90078

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

**BUSINESS REPLY MAIL**

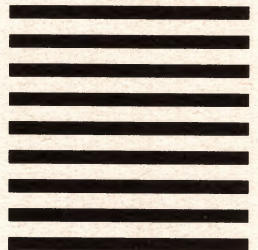
FIRST CLASS MAIL PERMIT NO. 23911 LOS ANGELES, CA

POSTAGE WILL BE PAID BY ADDRESSEE

skindiver

6725 Sunset Blvd.
P.O. Box 3295
Los Angeles, CA 90078

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



COZUMEL

IN THE MEXICAN CARIBBEAN



Photo By Geri Murphy

COZUMEL

Land Of Scuba, Sand & Siesta



photo/Geri Murphy



Top: Baitfish at a cavern entrance. Above right: Pretty señorita. Above: Pool at the Sol Caribe Hotel. Below: Pier at Hotel Barracuda.



TEXT AND PHOTOGRAPHY
BY STEVE LUCAS

All around, there was nothing but an underwater desert. Forty feet below the calm surface, the blue light of tequila-clear water danced and formed octagonal patterns on the sand. Could this be the Cozumel we had heard so much about? All we could see was our half dozen diving partners and a stray school of gray-black chub. The current pushed at our backs, making the use of fin or muscle unnecessary. We drifted in unison, one divemaster showing the way, another bringing up the flank.

At the extreme range of visibility, perhaps 200 feet away, a ridge of coral came into focus. Sections,

scattered like two story building blocks, formed what appeared to be a near solid buttress between the sand and the thick ink beyond. The bottom sloped downward, 50, 60, 70 feet. Colors began to snap and shapes became recognizable.

Seafans, gorgonians, 100 anemones per coral head and bright orange sponges enveloped everything. Dozens of iridescent blue and yellow queen angels swam among the lush overhangs and French angels, always in pairs, rushed out to greet us.

Anxious to reach the wall, our tribe began to rise, ready to swim over the barrier. Still on the bottom, our divemaster vanished. One by one we dropped back, taking his lead. Hidden among the thick cover, a cavern mouth lay gaping. Inside, a school of silvery snapper with bright yellow fins hovered in formation. At its end, framed by the stark color of the deep ocean, our leader motioned for us to follow. In pairs we drifted through, coming out to meet the edge of the world. In front, there was only a northward moving wall of water—to either side, a sheer cliff face splattered with the hues of an ethereal artist and decorated with a multiplicity of bizarre shapes. And beneath, there was a precipice so sharp it snatched our breath away. This was the

almost everything closes for siesta from 1:00 to 5:00 pm. Cozumel is purely, and proudly, Mexican.

Cozumel was originally a part of a mighty Mayan empire, the shattered ruins of which lie in the middle of a thick jungle interior. Only a trace of evidence of their presence remains.

Today, life on Cozumel revolves around its only city, San Miguel and its northern and southern hotel districts. The northern region is blessed with fabulous beaches, while the city and southern hotel zone is fronted by craggy ironshore rocks. Small beach coves are also sculpted in the shore in front of La Ceiba and Sol Caribe Hotels. Well to the south of El Presidente Hotel, the island becomes a non-stop ribbon of golden shore. Its sands meander all the way to the lighthouse-appointed southern tip and well up the "other side." In Cozumel, all the beaches are public. Regardless of where you stay you are welcome at any.

Along the seafront, and around the plaza, you can find a dozen or more very good restaurants. Menus are unusually economical and the quality at most is excellent. At some, you can enjoy an authentic Mexican (not Tex-Mex) dinner, including drink and tip, for \$3 or \$4. At others, a lobster feast with wine is only

And, after dinner, the discos at Neptuno and Scaramouche will keep you awake well past the time you ought to be in bed.

At least one day during your stay must be set aside for seeing the island. Getting around Cozumel is simple, and reasonably priced. Taxi fare from either hotel district to San Miguel is only a few dollars for up to four persons. Trips to the ruins, southern lighthouse and beaches on the opposite side of the island are more, yet still very affordable. Cars can be rented from any of nine major international or local rental agencies by the day or week. The most popular autos offered are VW bugs and jeeps. A fun way to see the sites is via moped. A word of caution, however, travel only in pairs. Not because you are in any physical peril, but because mechanical breakdowns are not uncommon. It is a very long walk from remote parts of the island back to your hotel. There are no roadside telephones.

Northeast of the airport, down a packed limestone road, are the ruins of San Gervasio. Easily found, it covers well over 100 acres. The jungle tries everyday to reclaim what has been cleared. Built over 1,500 years ago, little of the buildings remain, a monument to the Maya disappearance. In 1519 Cortez conquered the Maya at this site before sailing on to take all of Mexico. Thinking he was bringing them civilization, he leveled their temples and shrines to build churches. Mexican guides can show you the major points of interest.

A more substantial Mayan building is left standing (although marred by the hands of tourists who cannot stand to view history without carving their names on it) at the southern end of the island. Following the main highway until it runs almost into the sea, turn south on an adventuresome ungraded sand road. A small stone shrine with even smaller doors sits against a tall sand dune. The Tumba de Caracol, "conch" ruins, it is said to have been built as a navigational aid and ceremonial temple. After your exploration, continue to the end of the road. Here, you can climb the 127 steps to the top of the lighthouse.

Between San Miguel and the lighthouse lie the beaches of Playa Maya, San Francisco and Palancar. Backed by thick stands of coconut palms, several thatched hut restaurant/bars serve up Cozumelian and Yucatecan delicacies. They are strictly open air facilities. Fresh fish, tortillas, chicken, ribs and pastries are laid out in a family buffet. Nearby, volleyball nets are strung among the palms and sea grape trees. At one, a gangly, three foot tall, Coca Cola drinking spider monkey named Juanito ("little Juan") sits perched in the branches of a low, slanting coconut tree. When approached, he rushes down the trunk, turns his back, looks over his shoulder and points. He is



With fluffy white clouds in the sky, clear water below and a gleaming white cruise ship in the background, divers prepare to board a boat at the pier in front of La Ceiba Hotel.

Cozumel we had heard so much about.

Tucked at the western edge of this deep azure sea, less than a dozen miles from Yucatan, Cozumel does little to remind you of the rest of the Caribbean. To be certain, there are beautiful beaches and tall rattling palm fronds. The aquamarine water laps gently at the shore with the same intoxicating sounds as elsewhere and the trade winds blow. But here, there is something different. Instead of reggae-hard lyrics, the sounds of Latin guitars and the rhythms of salsa music dance across the cobblestoned plazas. Greetings are a polite *buenas dias* in the morning and *buenas noches* in the evening. Ladies shyly tuck their heads and smile when spoken to by a stranger and

slightly over \$10. If you are in a mellow mood, try Pepe's Plaza, El Foco or Pepe's Grill. For a bit more sophistication, try Morgan's or Grips. If you're in a wild mood, then it must be Carlos 'n Charlies where the waiters dance, toss you a towel and shoot a stream of wine at your mouth from five feet away! One of the more exotic seafood restaurants, Acuario, has a 30 foot seawater aquarium filled with reef fishes and moray eels in the middle of its dining room. Tanks full of nurse sharks and turtles are in the backyard. If you must have American food it will have to be Pizza Rolandi, Karen's Pizza or the Sports Page where you can get all the latest sporting news and watch your game via satellite on giant TV.

COZUMEL

indicating the place you should scratch.

The beaches play an important role in diving activities on the island. Instead of a single tank morning or afternoon trip, you can opt (as do most) for a full day on the reefs. The majority of better sites are up to an hour away from the hotel districts by boat. The operation you have selected to provide your dive services will pick you up at your hotel dock around 10:00 am. After the first dive on a deeper reef, the boat comes ashore at one of the beaches for lunch. Following your meal (included in the price of the trip), a game, swim, walk on the beach or siesta, your group heads back to a shallower reef for another dive. Normally, you are back at the dock by 3:00 pm. Of course, you can choose a fast morning trip if you prefer to arrive in time to have lunch at the hotel.

Dive operators in Cozumel have become very conscious of their obligation to protect their reefs and look after their clients in the past several years. As a result, diving, especially on the deep walls, is done primarily in groups. This controlled form of diving accomplishes two goals. First, divers are asked to keep at least an

arm's distance between themselves and the corals to prevent damage and reef destruction. In a group, the divemasters can look for persons who may be damaging the ecosystem. Secondly, the currents can be treacherous to the unprepared. By diving together, usually with a lead and follow-up divemaster, everyone can drift these magnificent reefs safely while the boat follows their bubbles. Should it be necessary for a diver to surface early, the divemaster always knows who is on the bottom and who is on the boat. Divers who refuse to stay with the group may find themselves adrift in deep water while the balance of the group is forced to waste time looking for their wayward counterparts.

Although the majority of diving is done by boat on the reefs of Paraiso (Paradise), San Francisco, Santa Rosa, Palancar, Colombia and Maracaibo, there are fun reefs close to several hotels. About 150 yards off the steps of La Ceiba Hotel pier lies the overturned wreckage of a large twin engine **Airplane**. Purposefully sunk as a Mexican movie prop, it is severely broken apart. A fun place to be introduced to Cozumel, it has thousands of sergeant majors, angels, groupers and snappers that swarm around any diver who even appears ready to offer food. It is a popular place for snorkeling when

the cruise ships come into port and up to 200 snorkelers can be seen congregating above the wreck at a time.

At the Airplane wreck and its surrounding reef you are likely to be introduced to Cozumel's almost ceaseless wall of moving water. Although normally tolerable at this site, the current can turn quickly into a mighty foe. A fickle trickster, it may run from the south when you enter, turn slack for a minute when you reach the wreck and run from the north on your way back to shore. Caution is suggested and, if you are new to diving, it is wise to seek the guidance of a divemaster on your first few swims.

Paraiso Reef is a long stretch of low coral running from near the airplane to the south of El Presidente Hotel. Although it is possible to dive from shore, it is best drift dived from a boat. A good spot for novice divers, it is shallow with depths ranging from 35 to 50 feet. Thousands of tame fish reside among the low corals and sponges and these have been handled by divemasters for many years. Four foot long spotted moray eels come out of their hiding places to swim freely when food is offered. Sometimes they become a bit too friendly and may try to get into your BC pocket!

Yocab Reef is often drifted as a second dive. The currents are frequently



LA CEIBA HOTEL

• Five Star Caribbean Hotel • Best beach diving on the island • Pool, spa, sauna, massage room, tennis court • Telephones & television in each room • Two bars, two restaurants • English-spoken throughout hotel • Divers board boats directly at La Ceiba Pier

CARLOS SIERRA'S DIVE COZUMEL

• Safe, competent dive operation • Four dive boats • Five PADI Divemasters • American PADI Instructor • 10 Years showing divers the best Cozumel has to offer!

LOOK AT THESE LOW, LOW ROUND TRIP AIRFARES CONTINENTAL AIRLINES

Chicago \$375	Austin \$255	New Orleans \$240	Mc Allen \$255	San Antonio \$255
New York 370	Los Angeles 350	Salt Lake City 365	Kansas City 340	Phoenix 375
Seattle 525	Denver 335	Baton Rouge 285	Minneapolis 375	Shreveport 366

COZUMEL•COZUMEL•COZUMEL•COZUMEL•COZUMEL•COZUMEL•COZUMEL

...accept our warm invitation to dive Cozumel, Mexico!

COZUMEL•COZUMEL•COZUMEL•COZUMEL•COZUMEL•COZUMEL•COZUMEL

\$524⁰⁰

8 Days & 7 Nights
per person, dbl. occupancy

Package includes:

- 6 two tank boat dives with lunch
- unlimited shore diving at the hotel beach
- 15% Mexican Hotel tax included
- Free use of tennis court (day or night)

- weights & belts with boat dives
- guide on boat dives
- For an additional \$137, 7 breakfasts and dinners will be included.

(Air transportation can be arranged. Commissions to travel agents & dive industry are fully protected.)

Two Worlds Travel

1307 1st St. Humble, TX 77338 **1-800-446-2166**

Texas residents call (713) 446-2166 collect for reservations only



circle #149 on Reader Service Card

The \$600 Cozumel Vacation.

It's less money and more fun than the \$299 one.

Club Cozumel Caribe. Set on San Juan Beach, the most treasured spot on Mexico's exquisite Caribbean island. With cool ocean breezes. White sandy beaches. And world-celebrated diving sites. Your own private paradise for as long as you want.

Club Cozumel Caribe where every wonderful detail is included. From adventurous day trips and quiet evening cruises to all you care to drink. There isn't a thing we've left out. At last a fully inclusive, thoroughly sensational and totally affordable vacation.



Free Scuba Diving! Free Cruises!

- **FREE SCUBA DIVING** for certified divers: including boat transportation to some of the world's greatest diving sites
- Action-packed Robinson Crusoe day trips. Make like a native! Sail south on a Spanish galleon along the sun-kissed coast. Take a dingy to the mainland for some fresh caught fish cooked over an open fire. Do some snorkeling or just relax in the sun. Then return to the galleon for a leisurely return cruise.
- Romantic moon-lit cruises. Rekindle the romance. Relax with the moon over your shoulders. Unwind. Have a few drinks. Dance. There's no better medicine.

circle #244 on Reader Service Card

**3 night/4 day Packages also
FEATURED AT
YOUR TRAVEL AGENT or call**



BARBACHANO

Travel Service Since 1923

1570 Madruga Avenue, Suite 309
Coral Gables, Florida 33146 (305) 662-5971

This Value-Packed Vacation Includes:

- A warm reception and personal assistance at the airport
- Round-trip transfers
- Club membership fees
- All tips at the Club, even the bell captain!
- All room, food and bar taxes
- Drink to your heart's content! Unlimited wine, beer and cocktails every day and night of your stay
- All meals—breakfast, lunch and dinner



There's more!

And at no extra charge.

- Marvelous nightly entertainment
- Fun-filled beach parties and fiestas
- Invigorating aerobics and stay-in-shape exercise classes
- Tennis, volleyball, shuffleboard
- Fast-paced table games
- Box-office hit movies
- Unlimited water sports. Go out as often as you like! Sailing, windsurfing, snorkeling, bottom fishing trips.

You'll Feel Like A Million At Club Cozumel Caribe.

Note: Reservations for all activities must be made on site. Some restrictions may apply. Refer to Guest Registration form for Responsibility, Disclaimer and Insurance information. Different types of travel insurance are available; ask your travel agent for details.



U.S.A. Except Florida

1-800-327-2254

Fla. Only 1-800-231-1127

In Cozumel
DEPORTES
ACUATICOS
ACUATIC SPORTS

DIVE WITH PROFESSIONALS
PADI NAUI CMAS FMAS INSTRUCTORS

THE SAFEST DIVE SHOP IN COZUMEL

Custom made dive trips, fast boats, 8 divers maximum on each boat. We have packages with hotels. Come be our friend, amigo.

Over 20 years diving experience

Sergio

Calle 8 norte @ Rafael Melgar
 Cozumel, Q. Roo, Mexico 77600

Call Direct:
011-52-987-20640
 For reservations & information

circle #150 on Reader Service Card

Galapago - inn
 RESORT



more than 15 years providing divers with the best quality packages. Truly Mexican atmosphere and attentive professional staff. Write for information:

P.O. Box 289, Cozumel, Q. Roo, Mexico 77600
 Phone (011-52) (987) 20663 See us at DEMA 1413

circle #151 on Reader Service Card

Poseidon
Dives Cozumel

There is a Difference—
Experience

- Only Established and Reliable Hotels/ Dive Operators Used.
- Local Poseidon Representation.

::Call or Write for Our Low Package Prices::

Poseidon
Ventures

359 San Miguel Dr.
 Newport Beach, CA 92660
 800-854-9334
 714-644-5344

505 N. Belt,
 Suite 675
 Houston, TX 77060
 713-820-DIVE

COZUMEL

strong and the sensation is similar to flying. Best visited only with an experienced divemaster, the coral heads rise up to 10 feet from the bottom with large schools of snapper and grunts found hiding beneath the overhangs sculpted by years of exposure to the perpetually moving sea.

Farther to the south, at the lower end of San Francisco Beach, **San Francisco Reef** lies in two major sections. Divided by a wide patch of sand, its primarily low growth slopes from a depth of 20 to well over 50 feet. Anemones cling to every other rock, some harboring tiny transparent shrimp deep inside their pale pink tentacles. The faces of some corals have been weathered and flattened by the current, allowing reddish pink boring sponges to overtake their surfaces. French and gray angelfish follow each group, constantly begging for a treat. Filefish hang on the edge of coral bluffs and slip into darkened openings when divers approach. With care, you can coax them out again for some photo sessions.

Along the way, four foot long groupers weighing up to 100 pounds and more wait to ambush food bearing divers. You see them on the horizon, hovering as if at the start of a race. Then, one by one, they zoom toward your group, veering away only at the last second. Don't tease them if you don't have a treat—they bite! If you come prepared, they will put on a show for as long as the food lasts. But when it is gone, so is the show.

Santa Rosa Wall is considered by most to be Cozumel's second best dive area. Beginning less than 20 yards down, it drops to a depth of several thousand feet. Numerous overhangs jut deep into the wall offering temporary shelter from the current's motion. Tame grouper are common and "sleeping" sharks have been observed in the caves. It is normally dived at a depth of 80 feet but large fans of lacy gorgonians decorate the entire face. Fish life is not abundant, but like a diamond at the end of a beautiful necklace, it is more than enough to make the reef sparkle.

Palancar is unquestionably the most popular dive on the island. More than three miles long, it is divided into seven sections making it impossible to see all of it in a single visit. **Palancar Gardens, Little Caves, Horseshoe, Palancar Caves, Ladrillas, Pinnacles** and **Deep Palancar** all share formations similar to Santa Rosa, but have their own distinctive characteristics.

The most popular of Palancar's reefs is Horseshoe (Herradura). Semicircular, it comes to within 20 feet of the surface. Condominium sized heads form an open ring around a sandy floor. It is probably



Dive Cozumel's famed waters with Cozumel's dive pros

**Inclusive 4, 6 or 8-day dive
packages from \$109 to \$273!***

Exciting packages to Mexico's Cozumel Island include two dives per day (one night dive also included with 8-day package), and each dive is complete with boat transportation, certified dive guide, two tanks of air per person, back pack, weights and belt, lunch and soft drinks.

Plus, every package includes:

- Choice of 7 Cozumel air-conditioned hotels (EP)
- Welcome cocktail
- Chaise lounge and towels
- Chankanaab National Park admission
- "Dive Cozumel Island" T-shirt
- Airport transfers, all taxes and service charges



CUT OUT FOR COZUMEL!

Simply cut out and return this coupon for more information and reservations! Or call your travel agent or call direct: Caribbean Divers-011-52-987-21080. TELEX: 753274 CAHOME

*Package price based on length of trip and hotel selected.
Prices effective 12/16/85 through 4/15/86.
PADI, NASDS, NAUI, YMCA, SSI, CMAS facilities.
Certification and courses available.

Please send complete dive package information.
I want to cut out for Cozumel!

NAME _____

ADDRESS _____

CITY/STATE/ZIP _____

Mail to:
CARIBBEAN DIVERS
Box 191, Cozumel, Q. Roo, Mexico.



Bill Dick Donna Heber

Aqua Safari

Box 41

Cozumel, Q. Roo, Mexico

Tel. 1-52-987-20661

Air, Hotel & Diving
Reservations Call or write:
Box 397

Friendswood, TX 77546

713-482 1954

TX 800 222-1537 + 994194

U.S. 800 225-0227 + 994194

20 Years Experience

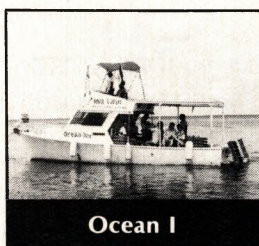
★ See Our Boats

★ Check Our Gear

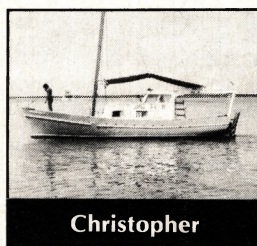
★ Witness Our Service



Ocean II



Ocean I



Christopher

circle #154 on Reader Service Card

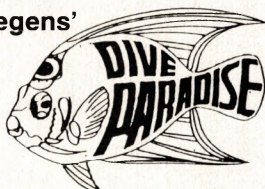
WARNING-DO NOT DIVE COZUMEL...

Until you receive the most comprehensive **FREE** information available on Cozumel diving, snorkeling & other activities

Tom & Dusty Hartdegens'

Dive Paradise
P.O. Box 222, Cozumel
Q. Roo Mexico 77600

★ **U.S. OFFICE**
(206) 441-3483
Over 10 years
experience



Cozumel's
Personal Service
Dive Shop

- ★ Hotel & Dive packages in all price ranges
- ★ Uncrowded, comfortable boats.
- ★ Professional bi-lingual staff
- ★ **GROUP RATES & SERVICES**

circle #155 on Reader Service Card



**WATERFRONT APARTMENTS
FOR SALE OR RENT
CONDOMEL, S.A.**

P.O. Box 142
Cozumel, Q. Roo, Mexico
Phone 20892

COZUMEL

the best and most popular underwater photographic area in Cozumel and locals consider visibilities of less than 100 feet poor. It can go as high as 250 feet owing to the reef's proximity to the stream of deep open ocean water.

Newly added to Palancar, a tall statue of Christ called the **Sacred Protector of the Ocean** stands among the corals. After being transported all over Mexico for blessing, the metallic sculpture was permanently placed near the edge of the precipice. With hands upraised, it is a dramatic addition to this reef.

Shallow Columbia runs inside its deeper walled counterpart. Coral buttresses begin in depths of less than 30 feet with sheets of silver and yellow snapper hovering among the heads. As you drift its length, the coral climbs closer and closer to the surface, finally coming to within only a few yards. Against a rich blue background, fattened stands of elkhorn coral point their unusually small branches away from the prevailing flow.

Columbia is among the most impressive sites on the island. At places, large two story coral mounds sit in irregular patterns separating the deep wall from the shallow sand. Anemones are thick and a unique cover of leafy algae grows over any non-living patch. Plate-like corals compete for space and schools of queen angelfish parade between the mounds. If you swim down any of the sand chutes the wall drops away into what appears to be a bottomless blue abyss. The current is always quick, making it imperative you stay with your group. The sensations are unique. Like a squadron of gliders, you flow with the liquid wind, your fins used only for steering.

At the end of this string of reefs, **Mara-caibo** is directly south of the lighthouse. It is sometimes called a high voltage dive and during the months of spring the sighting of sharks is not uncommon. Many shops display photos of the "sleeping" bull sharks that some say are regularly found at this location. Currents are often very strong and diving should be attempted only with a very experienced divemaster. Close attention must be paid to depth and direction since the next stop to the north is Cuba! It is not regularly visited owing to its distance from the hotel zone but special arrangements can be made for groups of experienced divers.

Accommodations on the island can be found to fit virtually any requirement. Owing to the devaluation of the Mexican peso against the U.S. dollar, prices, even at the best hotels, are very affordable.

In a cluster at the northern end of Cozumel you can find several of Mexico's most luxurious hotels. The Club Cozumel

Caribe, Mayan Plaza, Cozumelano, Cabanas del Caribe, Playa Azul, Cantarell and Mara can all be found on an exotic stretch of sand. At the Mayan Plaza, and others, Mexican guitars and the sounds of Latin music serenade while you enjoy a swim-suited lunch beneath poolside canopies. At the Club Cozumel Caribe, which has one of the best beaches on the island, you can leave your wallet at home once you've checked in. A membership (included with your reservation) entitles you to almost all the activities of the club. You don't even pay for drinks.

Near San Miguel, Galapago Inn, Casitas La Plaza and Barracuda are all popular with divers. Smaller hotel properties, the Galapago and Barracuda are right on the ocean, while the Casitas La Plaza is three blocks away. Between town and the southern hotel district, La Perla and Villablanca are also on or across the street from the sea.

Clustered near the international cruise ship pier, La Ceiba, Sol Caribe and Divers Inn are among the most popular hotels owing to their closeness to the reefs. La Ceiba and Sol Caribe are excellent luxury hotels offering a great number of amenities, including tennis. La Ceiba has its own shopping plaza, car and motor

bike rental and is on the ocean with a small beach. Close to the reef, its dive boat pier is one of the busiest on the island with divers from many hotels using it for beach entries. The Divers Inn is much smaller and economically priced. A mile or so farther to the south, El Presidente is also a quality, luxury property.

Flights to Cozumel are numerous and available from many parts of the U.S. with connections through several hub cities. Continental offers quick, direct service from Houston. AeroMexico also serves Houston, while American flies from Dallas/Ft. Worth, Mexicana flies from Miami and United from Chicago. If you are planning a visit to the Mexican mainland, service is available to Mexico City, Merida, Cancun, Playa del Carmen and the Mayan ruins of Tulum and Chichen Itza.

When you fly to the island, do plan to leave one thing at home: any sense of schedule or urgency. You are going away to a place where people do not get in a hurry and likely do not suffer from ulcers. *Manana* is the key word.

Cozumel: The people are gracious, the diving is great, the food and fun are nice and the price is right! Come to think of it, there's probably a plane leaving later today. Catch it. >#>

UNDERWORLD



ADVENTURES

Calle 2 Norte No. 6
Cozumel, Q. Roo Mexico
Telephone: (987) 2-10-90
Open 8 am to 9 pm

circle #157 on Reader Service Card

NEPTUNO DIVERS



NEPTUNO DIVERS

RAFAEL MELGAR AVE. AT 11 AVE. SUR.
COZUMEL, Q. ROO, MEXICO 77600
01-52-987-21537
01-52-987-21097

circle #158 on Reader Service Card

Adios Expensive Dive Vacation!



That's right! Goodbye high prices. Hello Cozumel!

Mexico's Caribbean is such a great bargain you can stay a week for the price of only a few days anywhere else. But don't think we skimp on your fun just because the cost is low!

Great food, a fabulous ocean side hotel, and some of the best diving in the world. Come to think of it, why not come on down right now!

8 DAYS/7 NIGHTS, BEFORE DECEMBER 15TH, AS LOW AS:
\$429⁰⁰**

U.S. Toll Free (800) 621-6830

La Ceiba / Fantasia Divers

La Ceiba Hotel • Attn: Linda Fountain, First City Bank Center

100 N. Central Expw., Suite 500, Richardson, TX 75080 In Texas: (214) 669-1991 • Telex 792475

**Per person, double occupancy, including meals, 2 boat dives daily, and unlimited beach diving directly in front of hotel. Taxes, gratuities, & transfers not included. After December 15, 1985, still a fabulous bargain at only \$636.00 per person, double occupancy! Other packages also available.

circle #159 on Reader Service Card

ZODIAC FIRST IN DIVE BOATS. THERE IS NO SECOND.



ZODIAC FIRST WITH SPACE-AGE FABRICS
for greater strength, air tightness, abrasion resistance, and longer life.

ZODIAC FIRST WITH THE FUTURA HULL for new excitement in inflatable boat performance. The addition of secondary inflation tubes give the FUTURA unprecedented maneuverability and increased payload.

ZODIAC FIRST WITH THE INTER-COMMUNICATING VALVE for single point inflation, balanced pressure, and extra safety.

ZODIAC FIRST WITH ANODIZED ALUMINUM FLOOR BOARDS for rugged treatment by divers and their equipment. Yet lighter, easier to assemble, and maintenance free.

ZODIAC FIRST IN RELIABILITY, PERFORMANCE, SAFETY, AND STABILITY. Can you afford to buy anything less?



The choice of the
**Cousteau Society
Expedition**

ZODIAC OF NORTH AMERICA
P.O. Box 400, Stevensville, Maryland 21666

There's Never Been a Better Time to Do What You Really Want in Life.

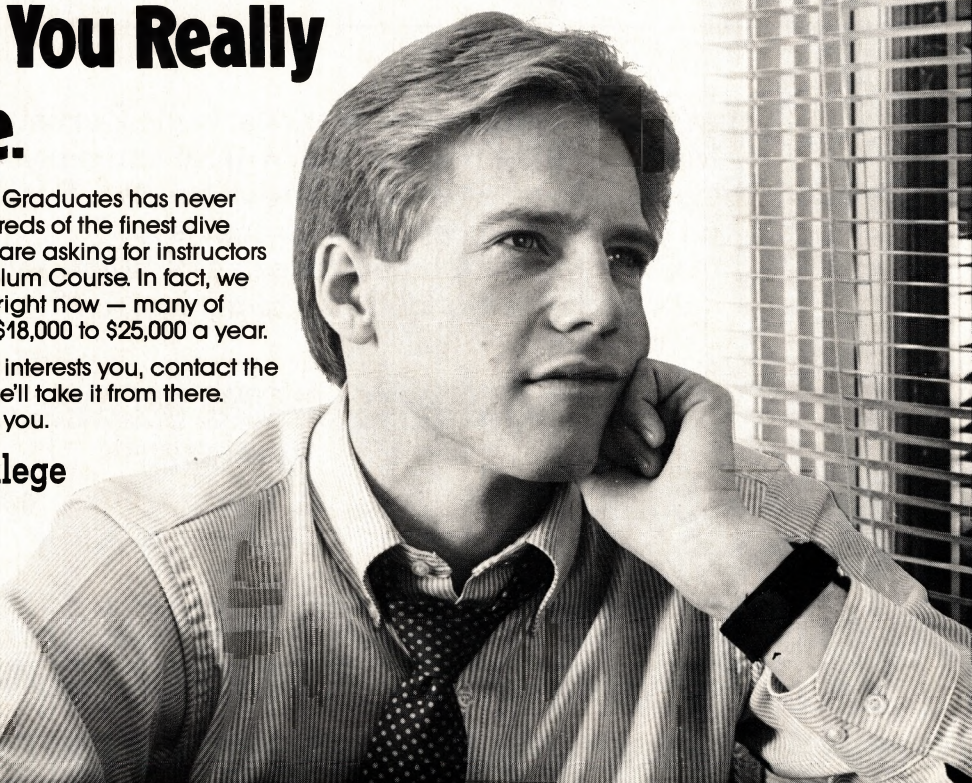
The demand for PADI College Graduates has never been greater than now. Hundreds of the finest dive stores and resorts in the world are asking for instructors from our famous Gold Curriculum Course. In fact, we have over 283 positions open right now — many of these offer starting salaries of \$18,000 to \$25,000 a year.

If being this much in demand interests you, contact the College Dean, Jim Williams, he'll take it from there. Remember, they're waiting for you.

PADI International College
1243 East Warner Avenue
Santa Ana, CA 92705

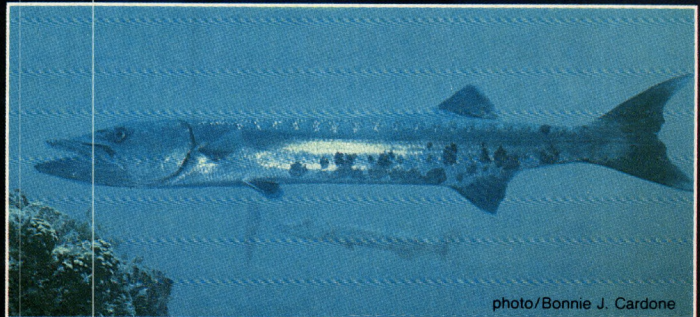
Call toll free:
Inside U.S.: (800) 235-3434;
Inside CA: (800) 223-8697
Outside U.S., call: (714) 540-7234
Telex: 678400 PADI INT SNA

If writing, include age,
address and phone number.

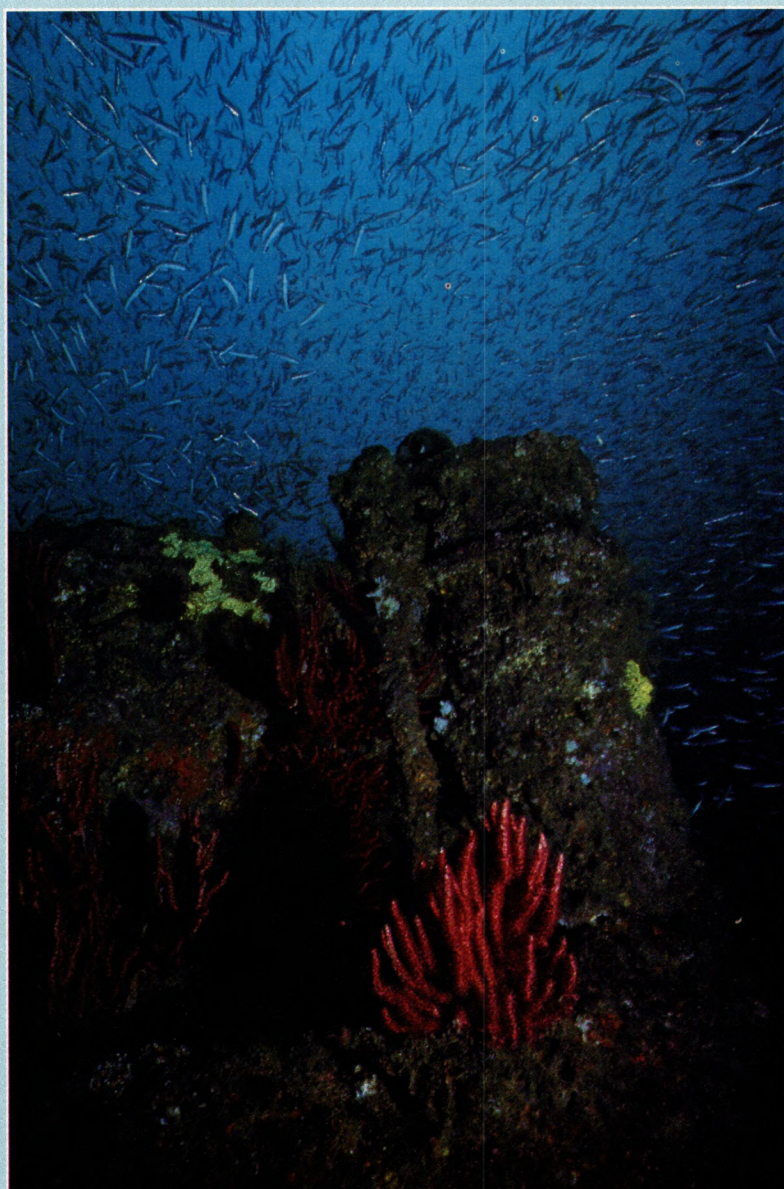


North Carolina

Dive The Graveyard



photo/Bonnie J. Cardone



photo/Bonnie J. Cardone

Over the centuries, treacherous currents, hurricanes, fog, war and accidental collisions have all done their share of damage—sending ships to the bottom. In addition to providing artifacts, thrilling photo backdrops and exciting exploration, these wrecks offer big fish action, colorful invertebrates and game. They are reached by dive boats out of Nags Head, Wanchese, Manteo, Beaufort, Morehead City, Atlantic Beach, Emerald Isle, Swansboro, Wrightsville Beach and Southport. Clockwise from left: Gorgonians and silvery baitfish on the *Caribsea*. North Carolina divers take their sport seriously, utilizing such gear as double tanks, lift bags and backup gauges. A catch of lobsters. Ed Bachmann with a porthole from the *Naeco*.



Caribbean-like diving off the coast of North Carolina? More than 100 shipwrecks of many different types at diveable depths? Warm, clear water and tropical marine life in the Graveyard of the Atlantic? All of this offshore a mid-Atlantic state? Yes, indeed! This and much more awaits divers trekking in greater and greater numbers to North Carolina,

N. Carolina Nags Head To Southport

TEXT AND PHOTOGRAPHY
BY ROD FARB

catching boat rides to visit the best wreck diving in America.

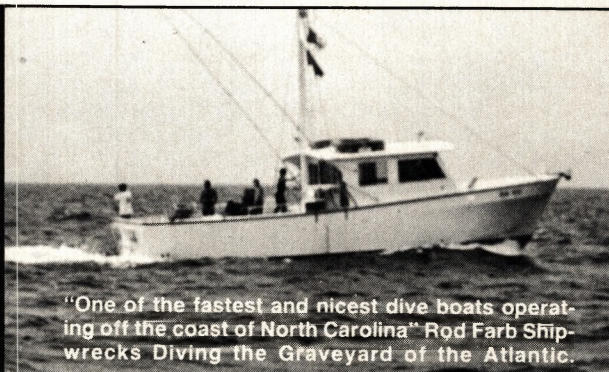
The North Carolina coast, long known for its history and natural beauty, is composed of three prominent capes—Hatteras in the north, Lookout in the middle and Fear in the south; a well-known stretch of barrier islands collectively known as the Outer Banks; numerous shifting inlets; several offshore islands; many resorts; and beautiful secluded beaches. Each of the three capes has shallow, shifting shoals extending many miles out to sea. The shoals, with their ever-shifting bottoms and treacherous currents, along with hurricanes, cold fronts, war, fog and accidental collisions have accounted for hundreds of ships coming to rest on the ocean bottom off the North Carolina coast—so many, in fact, that the area is known around the world as the Graveyard of the Atlantic. Ironically, out of the misery that gave rise to the graveyard, another kind of life is proliferating.

The source of this life is the Gulf Stream. The warm, northerly flowing current, often referred to as a "river in the ocean," flows up from the Caribbean past North Carolina. It swings closer to shore in the spring and summer and brings with it much of the tropical marine life divers are accustomed to seeing in the Florida Keys and the Bahamas. Beautiful and colorful organisms are abundant on the many wrecks in these waters.

Wrecks off the northern third of the coast are subject to different diving conditions than those off the middle and southern coasts. Roughly speaking, Cape Hatteras is the dividing line. North of Hatteras, wrecks lie in cooler waters because of the influence of the Labrador Current, which flows south to meet the warm Gulf Stream. There, the opposing currents turn away from shore and flow into the North Atlantic. Marine species found on wrecks in these waters are cold water types that might be found off New



SEA FOX
our 50'
USCG
Inspected
Fully
Equipped
Custom
Dive
Boat.



"One of the fastest and nicest dive boats operating off the coast of North Carolina" Rod Farb Shipwrecks Diving the Graveyard of the Atlantic.

NAGS HEAD PRO DIVE CENTER offers you the oldest full service dive facility on the Nags Head beaches. Our shop is conveniently located on the US158 Bypass in Kill Devil Hills on the corner of Fresh Pond Drive.

Nags Head Pro Dive Center offers historical shipwrecks with an abundance of sea life along the Nags Head and Cape Hatteras coast.

Our feature wreck the "U-85" was the first U-boat sunk by the U.S. during WWII. This 218' VII B Sub was built in Lubeck, Germany with displacement of 753 tons. She lies off Nags Head in 100' of water.

Our 50' custom dive boat SEA FOX is docked on the Nags Head-Manteo Causeway at Pirates' Cove Marina.

NAGS HEAD PRO DIVE CENTER
P.O. Box 665 • NAGS HEAD, NC 27959
TELEPHONE (919) 441-7594

circle #161 on Reader Service Card



Sea Wife Charters

NORTH CAROLINA WRECK DIVING



Sea Wife III
Capt. Hugh L. Wilde
Licensed to 6
passengers

Sea Wife IV
Capt. Buck Wilde
Licensed to 25
passengers

THE BOATS: Fast, modern, comfortable, and safe. Equipped with most modern navigation and wreck finding equipment.

WRECKS: U-352, WWI, Carib Sea, Atlas, Proteus, Papoose, Bedfordshire, Portland and more. Reef-Excellent for photography and spearfishing. Custom Dive Packages Arranged For Groups. Located Pier 8, Morehead City, NC.

Rt. 2, Box 614, Beaufort, NC 28516
919-726-5670-Boat; 919-728-5670-Home

circle #162 on Reader Service Card

York, New Jersey or New England. Water temperatures at depth will be in the upper 50s and low 60s (°F) so a full wetsuit and hood are advised. Visibility will average about 15-20 feet or less, but occasionally 70 feet or more.

South of Hatteras, diving conditions are markedly different. Eddies of the Gulf Stream provide clear, tropical water with temperatures in the high 70s and low 80s during the summer.

Diving the shipwrecks off the northern coast may be done by chartering dive boats out of Nags Head, Manteo and Wanchese. These visit several interesting wrecks. The wreck of the **U-85**, the first German U-boat sunk by the Allies in WW II, lies upright in 100 feet of water. Nearby, two tankers, the **Byron D. Benson** and **Norvana**, were both sunk by U-boats in 1942. The **Norvana** lies in 100 feet of water and is extensively broken up. The much larger and more intact **Byron D. Benson** sits in 90 feet of water. The passenger-cargo vessel, **Buarque**, and the large bulk carrier, **Marore**, were torpedoed in 1942. The **Buarque** sank in 140 feet of water and the **Marore** in 125 feet. The **Zane Grey** and **Dionysus** were liberty ships used in WW II that were sunk off Oregon Inlet by the state in the 1970s to serve as artificial reefs.

There are at least 14 wreck sites offshore Cape Hatteras and Ocracoke Inlet

that are frequented by divers. The British **Splendour** was a tanker torpedoed during WW II. It sank upside down in 110 feet of water. The **Dixie Arrow** is another tanker that was torpedoed in 1942. It lies broken up in 90 feet of water.

The tanker, **F.W. Abrams**, inadvertently struck a U.S. Navy mine in 1942 and came to rest in 85 feet of water. Depth charged extensively by the Navy as a hazard to navigation, the wreck is very broken up.

Several popular wreck sites are south of the **Abrams**. The **Proteus** was a passenger ship that sank in a collision with another vessel in 1918. The **USS Tarpon** was a WW II American submarine that sank while being towed to Baltimore. The **Keshena**, an ocean tug, struck a mine off Hatteras and sank in 1942.

Other wrecks in the area include the **Unis**, a small coastal freighter sunk in the early 1800s in 70 feet of water, as well as the **Empire Gem** and **Australia**, both torpedoed by U-boats in 1942.

Ocracoke is one of the most picturesque places on the North Carolina coast and should be included in a visit to this area. Accessible only by boat or small airplane, all of the island is a part of the Cape Hatteras National Seashore except for 775 acres that make up Ocracoke village on Silver Lake.

Leaving Ocracoke and moving south-

west down the coast, the Cape Hatteras National Seashore ends and the Cape Lookout National Seashore begins. Like the wrecks offshore, the Cape Lookout National Seashore is accessible only by boat. The offshore area between Ocracoke and Cape Lookout Shoals to the southwest contains several good wrecks. The diversity of diveable wrecks here is the greatest anywhere along the coast and includes the **Tamaulipas**, **Atlas**, **Amagansett**, **Caribsea**, **Ashkhabad**, **Portland** and **Thistleroy**.

Near the **Atlas** is the ocean fishing vessel, **Amagansett**, which sank in a storm in 1964 and came to rest in 130 feet. The **Caribsea** and the **Ashkhabad** were freighters that were torpedoed in 1942. The **Caribsea** rests in 85 feet of water and the **Ashkhabad** in 55 feet.

The **Portland** and **Thistleroy** were two freighters that sank on Cape Lookout Shoals, the former in 1943 and the latter in 1911. The **Thistleroy** is in 20 feet of water, extensively broken up and covered with coral growth. The **Portland** lies in 55 feet of water and has sections still intact.

South and west of Cape Lookout Shoals are some of the most interesting shipwrecks off the coast. The **W.E. Hutton**, **Papoose** and **Naeco** were tankers torpedoed during WW II. The **Hutton** sank close to shore in 70 feet of water and is broken up and spread over a large area.

DIVE THE GRAVEYARD OF THE ATLANTIC

EJW Sports Shop

We offer: Complete PADI training facility, indoor pool, equipment rental, repair, air, VIP, hydro and much more. Receive 5 free air fills with dive reservations. Group rates available.

Call David or Roy at:
EJW Sports Shop
2204 Arendell St.
Morehead City, NC 28557
919-247-4725

SALT SHAKER V

New 36' dive boat fully equipped
Running charters to 30 or more wrecks.

Call: 919-726-8852
P.O. Box 275

Morehead City, NC 28557
We dive the submarine USS Tarpon and the luxury liner Proteus.

EASY STEP CHARTERS

Good diving is going diving. No group is too small.
Call Bob Eastep: 919-726-2311
203 Neuse Ave., Morehead City, NC 28557



Charter Motel

On The Water Front

405 Evans Street
Morehead City, NC 28557
919-726-3256

Morehead City's Only Scuba Divers Motel

MOREHEAD MOTOR INN

Conveniently located near the Grave Yard of the Atlantic. We offer an enclosed and heated pool and dry sauna. Breakfast served daily. New rooms with cable vision & HBO. Discount rate for certified divers.

Hwy. 70 West
Morehead City, NC 28557
919-726-5141



under the striped yellow awning
on the Morehead City Waterfront

EXCELLENCE IN TRADITIONALLY PREPARED SEAFOOD

Open 11:30 a.m.-10:00 p.m.
Tuesday-Sunday

711 Shepard St.
Morehead City Waterfront
(919) 247-3474

LOVE AT FIRST BITE



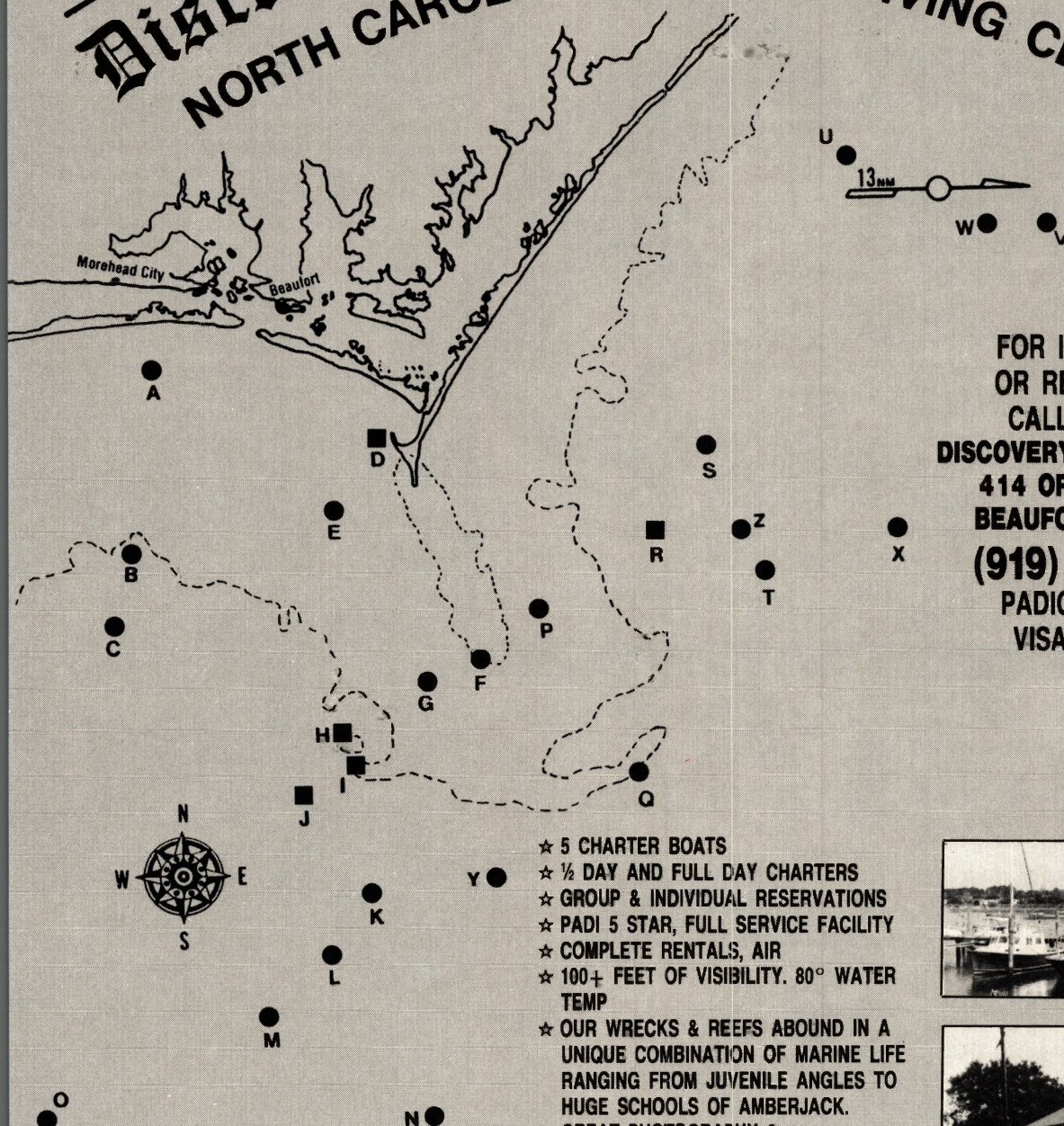
3500 Arendell St.
Morehead City, NC
919-726-9683

DIVERS WELCOME!

Paul and Jim Johnson
your hosts

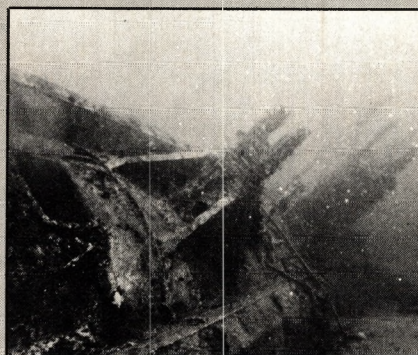
Discovery Diving Company, Inc.

NORTH CAROLINA'S WRECK DIVING CENTER



FOR INFORMATION
OR RESERVATIONS
CALL OR WRITE:
DISCOVERY DIVING CO., INC.
414 ORANGE STREET
BEAUFORT, NC 28516
(919) 728-2265
PADICARD, M.C. &
VISA ACCEPTED

- ★ 5 CHARTER BOATS
- ★ ½ DAY AND FULL DAY CHARTERS
- ★ GROUP & INDIVIDUAL RESERVATIONS
- ★ PADI 5 STAR, FULL SERVICE FACILITY
- ★ COMPLETE RENTALS, AIR
- ★ 100+ FEET OF VISIBILITY. 80° WATER TEMP
- ★ OUR WRECKS & REEFS ABOUND IN A UNIQUE COMBINATION OF MARINE LIFE RANGING FROM JUVENILE ANGLES TO HUGE SCHOOLS OF AMBERJACK. GREAT PHOTOGRAPHY & SPEARFISHING



Legend

Name—Depth—Type

■—Reef

●—Wreck

A Parker-55' Liberty Ship	N Naeco-140' Tanker
B Suloide-67' Freighter	O Cassimer-110' Tanker
C Hutton-68' Tanker	P Portland-55' Freighter
D Cape Lookout-45' Rock Jetty	Q Ashkabad-55' Freighter
E Senateur Duhammel-57' Armed Trawler	R 1700 Rock-90' Reef
F Ea-45' Barge	S Caribe Sea-85' Freighter
G Fenwick Isle-65' Menhaden Boat	T Atlas-130' Tanker
H Little Ten Fathom-60'-80' Reef	U British Splendor-100' Freighter
I Big Ten Fathom-60'-80' Reef	V Tarpon-130' U.S. Sub
J Eaststep Reef-80'-100' Reef	W Proteus-130' Ocean Liner
K U-352-115' German Sub	X Tamaulipas-140' Tanker
L Shurtz-120' WWI Cruiser	Y Rock Pile-102' Barge
M Papoose-120' Tanker	Z Amaganzette-120' Menhaden Boat

- ★ GROUP ACCOMMODATIONS ON SITE, SLEEPS UP TO 20, WITHIN WALKING DISTANCE OF RESTAURANTS, STORES & BEAUFORT HISTORICAL SITES
- ★ CERTIFICATIONS AVAILABLE IN PADI ADVANCED & SPECIALTY COURSES: NIGHT DIVING; WRECK DIVING; DEEP DIVING; SEARCH & RECOVERY; U/W HUNTER; U/W PHOTOGRAPHY; EQUIPMENT SPECIALIST.

circle #163 on Reader Service Card

SKIN DIVER DECEMBER 1985 71



Explore the World Beneath the SEAS!

With over 500 other divers
at the 6th Annual

SEAS '86 3 Day SCUBA CONFERENCE

Featuring JEAN-MICHEL COUSTEAU

Plus 15 other speakers... treasure hunters, scientists, physicians, archaeologists, photographers conducting 24 workshops.

FEBRUARY 28-MARCH 2, 1986

Large SCUBA trade show ★ 70 Prize Drawings ★ Cousteau Film Festival ★ Photo Contest ★ Socials ★ DAN Course ★ Archaeology School ★ at the Raleigh, North Carolina Civic Center and Radisson Plaza Hotel. For information write: SEAS, P.O. Box 31186, Raleigh, NC 27622; Telephone: 919/781-0559



circle #164 on Reader Service Card



Charter your
North Carolina
wreck dives with...

SCUBA SHACK

PROFESSIONAL SCUBA INSTRUCTION
DIVE VACATIONS • SPORTSWEAR
• SALES • RENTALS

Hours: 10 am-6 pm Mon.-Sat.



(919) 274-0047
1835 Spring Garden St.
Greensboro, NC 27403

circle #165 on Reader Service Card



Full Service Dive Shop
BOB McIVER
Owner/Manager

• SALES
• RENTALS
• DIVE CHARTERS
• PRIVATE &
SEMI-PRIVATE LESSONS
4022 Market Street
Wilmington, NC 28403
(919) 762-7078

circle #166 on Reader Service Card



• CHARTER • RENTAL • SALES • SERVICE •

Scuba South
Diving Company
Dive the 'Seldom-Dived' Wrecks of NC

222 South River Dr.
Southport, NC 28461
(919) 457-5201

INSTRUCTION

SALVAGE



DIVE North Carolina's

GRAVEYARD OF THE ATLANTIC

North Carolina's largest, most professional full service inland dive shop. Offering complete dive services to the "Graveyard of the Atlantic". Group and individual charters available. Professional instruction to all levels of certifications.

"Your Complete
Diving Center"



2600 South Blvd., Charlotte, NC 28209
(704) 525-9234

circle #167 on Reader Service Card

The *Papoose* and *Naeco* are in deeper water more than 30 miles from shore.

The *U-352* was the first German U-boat to be sunk by the Coast Guard during WW II. Depth charged, the sub sits at 115 feet about 20 miles from shore. The *HMS Bedfordshire* and the *Senateur Duhamel* were two British armed trawlers loaned to the United States to fight the U-boats early in WW II. The *Bedfordshire* was torpedoed and sank in 105 feet off the tip of Cape Lookout Shoals. She was literally blown out of the water and not much remains of the vessel. The *Senateur Duhamel* collided with another vessel in the Morehead City shipping lanes in 1942 and sank in 65 feet of water.

The *USS Schurz* was a German-built naval cruiser confiscated by the U.S. Navy prior to the American entry into WW I. Originally named *Geier*, the vessel was on duty off Morehead City when it was accidentally rammed by an American tanker. It sank in 110 feet of water.

The *Sulolde* sank in 1943 after striking the submerged hulk of the *W.E. Hutton*.

The *Fenwick Island* was an ocean fishing vessel that sank in 65 feet of water. It lies intact on its port side.

Closer to shore, in shallow water, is the wreck of the *Theodore Parker*, a WW II liberty ship sunk as an artificial reef.

Southwest of Cape Lookout and about 35 miles offshore New River Inlet are three superb wrecks, the *Cassimir*, *Nor-mannia* and *Esoo Nashville*.

South, in the Cape Fear area, there are many nearshore and several offshore shipwrecks. Wilmington was an important Confederate port during the Civil War and many Confederate blockade runners were run aground in the area while being chased by Union blockaders. There are several blockade runners and a few blockaders sunk close to shore in the surf zone along the stretch of coast from north of New River Inlet to southwest of Cape Fear. The *Modern Greece*, *Fanny and Jenny*, *USS Peterhoff*, *Bendigo*, *Hebe* and *Phantom* are Civil War vessels sunk in this area.

Offshore wrecks in the Cape Fear vicinity are quite interesting and present some of the very best dives this part of the coast has to offer. The wreck most often visited is the *John D. Gill*. Sunk in 1942 by the *U-158*, the tanker was the largest ship to be sunk off the North Carolina coast during WW II.

The *Alexander Ramsey* was a WW II liberty ship sunk near Masonboro Inlet off Wrightsville Beach in 50 feet of water as another artificial fishing reef.

Offshore the southernmost part of the coast, southwest of Frying Pan Shoals, are three good wreck dives in relatively shallow water with good visibility. The *George Weems* lies in 40 feet of water near the tip of Frying Pan Shoals.

On the southwest side of the shoals are the wrecks of the *Mount Dirfys* and the *Raritan*.

circle #168 on Reader Service Card

SDM travel

SECTION

"We've visited Sunset House five times since 1975. The people here treat you right. There are no surprises—they are consistent, dependable and leave us alone. The boat diving is good, but we like the shore diving right here—just offshore. We were playing with two angelfish just a few minutes ago. We like Sunset House and will be back again."

These were the words of Lisa and Dan Cole, of Ft. Dodge, Iowa, a couple we recently met and interviewed at Sunset House. They, as well as several other guests we talked to, were obviously enjoying their visit.

Sunset House, a tradition on Grand Cayman, was founded in 1958 by Hebe Conners. Tourism was just getting started and she created Sunset House—the fifth hotel on the island—by adding eight rooms to her home. The shore diving was excellent and her guests could rent tanks from nearby dive shops. It was in these early years when her son, Adrien Briggs, began scuba diving.

Adrien returned from college for a summer vacation in 1969 and became so deeply involved with new construction that he never went back. Each time we've visited Sunset House, Adrien has been enthusiastically working on a new project. Over the years, he has replaced all the original buildings and added several more. But he never stops—his latest project is new landscaping. We felt a tinge of nostalgia as we passed the laundry room. In 1972, it had been a guest room that housed the first Jim and Cathy Church U/W Photography Course.

Today, Sunset House has 42 spacious, air-conditioned rooms, including two waterfront apartments where the entire floor can be made into a large three-bedroom apartment with kitchen. Everything you need—the beautiful new coral rock Sunsetter



SUNSET HOUSE in the heart of Grand Cayman

TEXT AND PHOTOGRAPHY
BY JIM AND CATHY CHURCH

restaurant, native style thatched-roof bar, gift shop, Sunset Divers dive shop, boats, saltwater pool and shore diving—are within a couple hundred feet of your room.

The Sunsetter restaurant is marvelous. The service is gracious, the setting is soothing and the food, delicious. The menu is changed each evening, so you could eat there for the entire week without running out of great things to try.

The low key, two-story resort is surrounded by green gardening and landscaping. Large sailing ship anchors resting near a seaside bar, and huge pirate cannons mounted on wooden gun carriages near the water, add to the decor and inspire your imagination. But the true personality of Sunset House is owing largely to people, not props. Both Adrien and Bonnie, his charming and capable wife, are working managers who stay involved with their guests and the daily operation of their resort.

Nestled on an ironshore of ancient coral, Sunset House has an ideal loca-



Clockwise from above left: Pat Davis gives a pre-dive briefing. Bonnie and Adrien Briggs, owners/managers of Sunset House. Thatched roof bar.

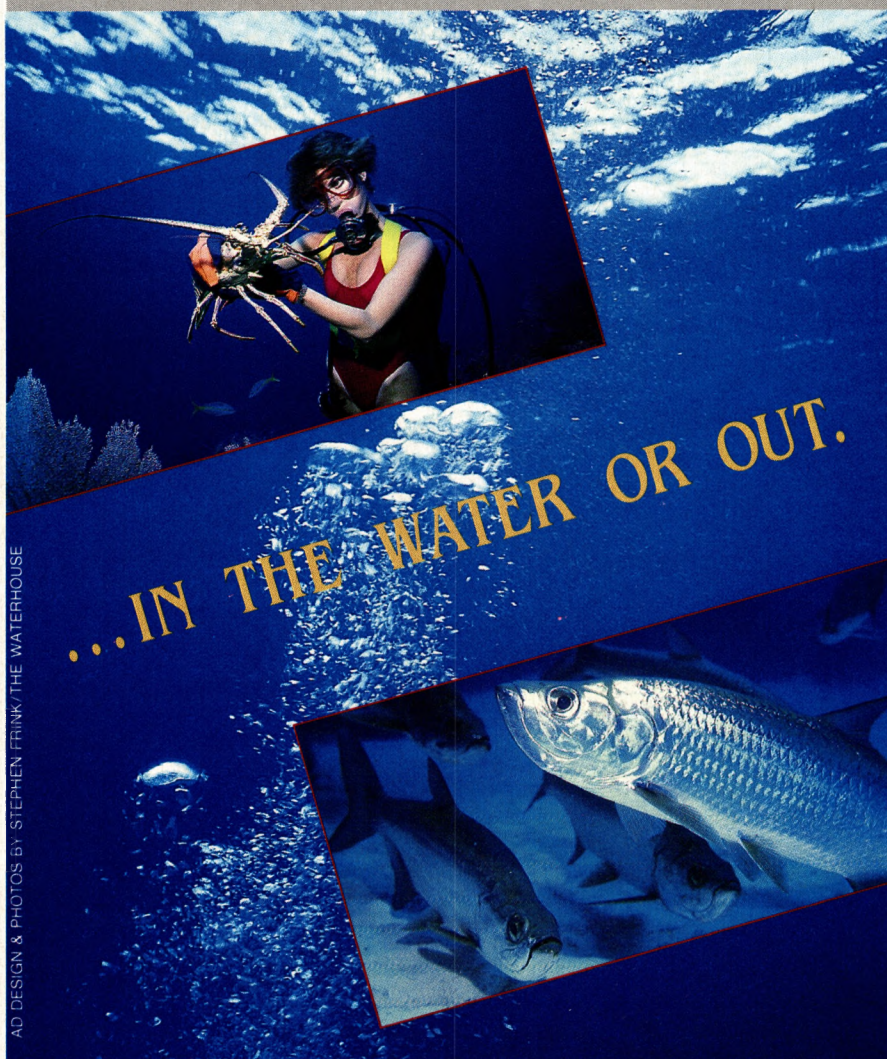
tion on the protected southwest side of Grand Cayman. The summer seas are almost always flat calm and water temperatures range from about 84°F in summer to 80°F in winter. If an occasional winter storm roughens the sea off Sunset House, the Sunset Divers bus and two covered trucks take you to meet the boat at the nearby southern shore. Thus, there is almost always a place to dive, regardless of the weather.

Although we have mentioned the south shore as a back-up dive site in case the weather gets bad, we didn't mean to imply that it is second rate diving. Quite the contrary—south shore is excellent and it is only diveable when the weather is bad for the rest of the island. The area abounds with large elkhorn corals, tunnels and crevices, and lots of fish.

Sunset House is not only on the

(Continued on Page 78)

GRAND CAYMAN, B. W. I. IN A CLASS BY ITSELF



AD DESIGN & PHOTOS BY STEPHEN FRINK/THE WATERHOUSE



Spanish Cove

For Information Call 1-800-231-4610
In Florida and Outside Continental U.S. 1-305-381-9954

circle #169 on Reader Service Card



Magnificent Dive Sites • Loaded with Marine Life • Unlimited Diving • Nite Dives • Great Meals • Snacks • A/C • Video • Sundeck • Dolphins

THE 90' SEA AGGRESSOR

P.O. Box 1778,
Jupiter, FL 33468; (305) 747-6647

PORT LARGO RESORT NAME CHANGE

Port Largo Resort, Pennekamp Park's luxury dive lodge, has changed its name to Marina Del Mar. According to owner, Stuart Marr, the name change "better reflects the essence of our resort, known for its nautical atmosphere and aquatic activities."

Marina Del Mar is under the same ownership and management and will continue to cater to the vacationing diver who



wants to dive Pennekamp Park in a first class setting.

Within the last year, three additional shops have opened at the resort. Ocean Diver's Ship's Store carries marine supplies and provides fuel to divers who bring their own boats. Doc's Galley restaurant serves breakfast and lunch in a waterfront setting directly adjacent to Ocean Diver's dive shop. Club Nautico rents boats to divers who are familiar with the waters of Pennekamp Park.

Marina Del Mar will have 48 additional lodging units in February. These will be smaller than the existing two bedroom, two bath suites and are intended to provide first class accommodations to single divers and couples for less.

Additionally, Coconuts, Marina Del Mar's waterfront cocktail lounge, is being moved to a new, separate building and will serve lunch and dinner.

For more information on Marina Del Mar, call (800) 451-DIVE. In Florida call (800) 253-3483.

THE REEF SHOP

The Reef Shop of Islamorada in the upper Florida Keys is heading into its 14th season with new owners and a new look. Randy Galloway and Bill Stevens, formerly of Capt. Slate's Atlantis Dive Center in Key Largo, have purchased the full service facility.

The Reef Shop offers instruction, sales, service and rental along with charter dive boats, dry storage and diving vacation packages with area resorts and motels. For more information contact: The Reef Shop, Rt. #2, Box 7, Islamorada, FL 33036, (305) 664-4835.

THE UNDERWATER WORLD OF CURACAO. IT'S AN AQUATIC STYLE OUR WAY.

Plunge into a world like no other—The Underwater Park of Curacao. Over 12 miles of unspoiled natural beauty right off the coast of the most beautiful island in the Caribbean, Curacao. This coral reef sanctuary was created just for you and a few million species of marine life. From the black coral trees to reefs that emerged during the ice age, the Underwater Park staff will guide you to a hundred fascinating and spectacular sites. And to insure your safety, the government of Curacao has provided protected beaches and the finest compression chamber anywhere. And whenever you care to surface, the fantastic island of Curacao awaits your every pleasure. From sun drenched beaches to a night life unrivaled in the Caribbean. Take the plunge. Everything you ever wanted in an underwater vacation is the Underwater Park of Curacao.

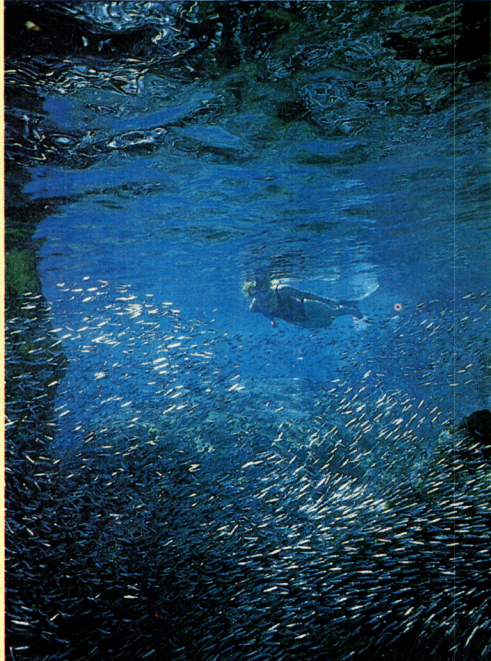
See your travel agent or call: The Curacao Tourist Board
400 Madison Avenue, Suite 311, New York, New York 10017
Tel: (212) 751-8266 • 330 Biscayne Blvd., Suite 806, Miami,
Florida 33132 Tel: (305) 374-5811



CURACAO UNDERWATER PARK

CURACAO

WE HAVE A STYLE ALL OUR OWN



Top left: The elegant *La Buscadora*. The vessel offers easy access to the water (above) and richly appointed staterooms (left). Far left: The Caves, Ginger Island. Below Left: The 52 foot *Flute*. Bottom left: Rik Van Rensselear and Lee Ann La Cessa. The *Flute*'s aft cabin offers the same luxury as its forward cabin. Below: The *Rhone*.

REGENCY



The traditional way to take a dive vacation is either from a land-based resort aboard a custom boat designed for day charter or to live aboard a boat generally set up to accommodate 12 to 24 divers. There is another alternative that may be considered in the Virgin Islands, an alternative perhaps more intimate and personalized; the crewed charter of a luxurious private yacht.

The United States and British Virgin Islands comprise some of the world's best cruising grounds and it is no surprise that some of the world's finest yachts are based there. There are scenic beaches; lush volcanic isles; secluded and protected anchorages; a balmy subtropical climate; exceptional diving with clear water, good reefs and several great wrecks; consistent trade winds for spectacular sailing and cool evenings; and an island infrastructure capable of handling a huge fleet of boats from repairs to provisioning to efficient charter liaison. Among the most successful of the charter agencies is Regency International Yacht Charters. At Yacht Haven Marina in St. Thomas, Regency represents a fleet of more than 300 fully crewed yachts and is able to offer some very specific and knowledgeable advice when it comes to choosing the yacht and crew for your dive/cruise adventure. Regency represents both

tical side there is expansive deck space for sunbathing; a modern and efficient galley under the direction of chef Bonnie Gneiser who consistently turns out gourmet fare; a watermaker; a compressor and full complement of tanks and scuba gear; a 20 foot Seacraft chase boat with a 185 hp outboard for both waterskiing and dive ventures; an inflatable chase boat; and a dive platform.

Based in Roadtown Harbor in the British Virgin Islands, *La Buscadora* is usually crewed by Captain Skidmore, chef Bonnie, first mate Jeff Gneiser and stewardess Sarah Sheard. The boat will accommodate four passengers and the level of service is very high and friendly. The normal charter is one week and will typically include some of the best British Virgin Island dive sites such as the *Rhone*, the Indians, Deadchest, Peter Island, the Invisibles, the Dogs, North Sound at Virgin Gorda and Cooper Island. Since the group is small and the attention so one-on-one, the specific itinerary and number of dives per day is very flexible. The boat will usually cruise at about ten knots, but since the islands are clustered so close throughout the Sir Francis Drake Channel we were never far from a good dive site or anchorage.

The boat is quite stable at anchor and the platform comfortably sturdy. The

style, incorporating his love for the sea and sailing with his interest in and affection for people. Having vacationed on a crewed sail charter in the Virgin Islands, Rik knew where and what he intended, but he was missing an essential ingredient, the boat. After considerable research he decided the Irwin 52 footer was the ideal vessel because of its luxurious interior, spacious guest accommodations and sailing abilities. He set about having one built to his very demanding specifications, even living near the yacht works in order to oversee all stages of construction. The resulting vessel, the *Flute*, has evolved into a superb charter boat for two couples and is one of the most popular charter boats working out of the Yacht Haven Marina in St. Thomas.

One of the unusual features of the *Flute* is the similarity of accommodation between the foreward and aft staterooms. Since the majority of Rik's guests are two couples, it was important that neither feel slighted and with these accommodations it is apparent none will. Each stateroom is air-conditioned and has a head and shower, translucent ports for fresh air, a light, drawers and closet, and a spacious double bed. The main saloon is all teak and carpet and the adjacent galley is better equipped than most homes. The cuisine is the province of first mate Lee Ann

YACHT CHARTERS

Go In Style - Sail Or Power

TEXT AND PHOTOGRAPHY
BY STEPHEN FRINK

power and sail boats, and during a recent trip to the Virgin Islands we had the opportunity to experience superlative examples of each.

DIVE/POWER

She is impressive even at first glance. *La Buscadora* (The Searcher) is 74 feet of teak elegance with a hull laid down in 1941 as a prototype to the PT boats and an interior and superstructure completely renovated in 1978. From the gleaming brightwork to the evident skill of the ship's carpenters, from the immaculate engine room to the spotless galley, from the fully equipped bridge to the state-of-the-art stereo and video center, *La Buscadora* is obviously a labor of love. Captain Russ Skidmore has been involved with the restoration and charter of the vessel for more than seven years and his efforts have created one both elegant and functional.

On the elegant side there is wall-to-wall carpeting, track lights, individually adjustable air-conditioning, whirlpool bath, double beds and showers and head for each of the two guest staterooms. On the prac-

power is 110 volts, 60 cycles and there are plenty of outlets in the staterooms for charging strobes and lights. While I wouldn't classify *La Buscadora* as a dive boat, she is a luxury yacht admirably suited to diver convenience. Captain Russ is an enthusiastic diver and an instructor and has a thorough knowledge of the best dive sites in his home waters. Of course, there is more to a successful charter experience than the physical aspects of the charter boat: By the time you spend a week on a boat, the personalities of the crew are of equal import. *La Buscadora* could be operated as a formal and stuffy charter with intentional distance between guests and crew, but instead the atmosphere is friendly and relaxed. After a few days it's as if your friends had invited you to their home, except that the food is very likely better, the service superior, the surroundings more opulent, and the dive potential greater.

DIVE/SAIL

After a successful career as a businessman in the Northeast, Rik Van Rensselear elected to create a new life-

La Cessa and it is of impeccable quality. The *Flute* claims to be the most publicized Irwin yacht in the world, and Rik showed me numerous magazine articles from the ship's library written about guest's experiences aboard the charter. Not only were the articles consistently glowing with praise, but each raved about the cooking. I'll have to concur.

The *Flute* offers several options to the traveling diver. A compressor has just been installed so the vessel is very self-sufficient in terms of dive itinerary. However, most of the best diving is within a range in the British Virgin Islands that is also serviced by Underwater Safaris from Tortola. This permits guests to dive directly from the *Flute* or to rendezvous with one of the day charter boats from Underwater Safaris should a special service like E-6 film processing, underwater photo instruction, a resort course, rental scuba equipment or even a full certification course be required. One of Underwater Safaris three custom boats will meet sailboats at their anchorage, the divers will transfer boats and zip off to one of the

(Continued on Page 84)

SUNSET HOUSE

(Continued from Page 73)

Sunset House is not only on the best diving side of the island, it is also just a few minutes from the beautiful, rebuilt Owen Roberts airport. After checking through customs, you take a five-minute cab ride to Sunset House. Get checked in, unpack your gear bag and if you are not tired from your travels you could be underwater in just a few more minutes. If you wish to explore the island, Budget Car Rental is just a few minutes away or they can deliver a car to you. You can shop at the lovely boutique right at Sunset House or you can walk to Georgetown, where you will find many beautiful duty-free items. The restaurants and beaches of world-famous Seven Mile Beach are all less than ten minutes away.

Sunset Divers, the Sunset House dive store, is managed by Ron Levanas, who was named Manager of the Year at the 1985 DEMA convention. Ron can supply all your equipment needs, including 80, 71.2 or 50 cubic foot tanks. If your regulator needs an adjustment, Dan Morris can handle the job.

A typical day begins at 9:00 am when you board one of the three boats for a two-tank boat dive. The 31 foot *Sundiver*

can take up to 16 divers and the 36 foot *Eagle Ray* and *Leopard Ray* can take up to 20 divers each. The boats pull into a protected slip near the seaside bar and you step aboard from the ironshore. These boats are designed for easy diving. Most of the boat is open deck space, with large benches along the sides. There is a convenient dive platform aft and a small bow deck for sunning. The main deck is covered for protection from the sun. Ron Levanas, Barry Baker and the other divemasters give excellent pre-dive briefings and chart the dive profile on a large chalkboard. The trip starts with a poll of the divers to find out where they have already been and where they would like to go. We dove with Pat Davis and David Wolf and were impressed with their cheerfulness and professionalism.

The first dive is usually on a wall and may be a well-known Cayman site, such as Trinity Caves, Big Tunnel or Orange Canyon or it may be one of Sunset Divers' many special sites south of Georgetown. We were amazed at the beauty of Armchair Reef with its huge basket sponges, yellow tube sponges, red finger sponges and friendly angelfish. Table Rock has elkhorn corals, caves and crevices, tunnels and deep seafans. Eagle Ray Rock features beautiful sponges and lush marine growth.

The second dive is shallower and may again include a well-known site such as

the *Oro Verde*, Eden Rocks or the *Balboa*. Or divers may request special sites farther south where few operations travel. If you're tired of the regular Cayman sites, these and Sunset Divers' other spots will pleasantly surprise you.

After the two tank boat dive, most people head for the seaside bar for a hearty lunch such as chicken, burgers or fish and chips and plan their afternoon. If you



have a group of three or more people, you can arrange for an afternoon boat dive. You may, however, prefer to enjoy the easy beach diving. Just step off the ironshore and you're in 15 feet of water. The bottom slopes gently downward and is covered with small coral heads, gorgonians and sponges. Swim out a couple hundred feet and you'll probably be accompanied by an angelfish. Getting out

Dive the exciting wonders of... INCREDIBLE MICRONESIA

TRUK LAGOON TO
POHNPEI AND THE
OUTER ATOLLS

12 DAY ODYSSEY OF
LUXURIOUS TRAVEL ABOARD
THE S/S 'THORFINN'

Travel and dive one of the world's largest and best
fitted dive ships exclusively exploring this remote
fantasy world of islands and reefs.

SEE US AT THE DEMA SHOW JANUARY 16-19 1986

CALL NOW FOR WINTER '85-'86 DETAILS

SEE & SEA TRAVEL

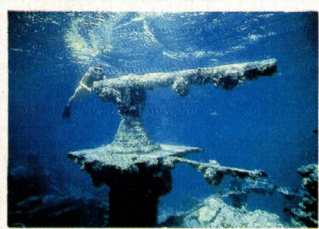
1-800-DIV XPRT
415-771-0077
680 Beach St., Ste. 340
San Francisco, Ca. 94109

SEAWARD HOLIDAYS

Honolulu 800-222-4552
Vancouver 800-663-8746
2315 Commissioner St.
Vancouver, B.C. V5L 1A4

OR CONTACT YOUR LOCAL TRAVEL AGENT

- Unlimited diving from 24' launches
- Magnificent wartime wrecks
- Spectacular reef dropoffs
- Brilliant soft corals
- Abundant pelagic life
- Optional windsurfing & fishing



of the water is also easy. A three-rung ladder is attached to the vertical iron-shore wall.

Once you've tried the shore diving by day, you may wish to try it by night. You and your buddy simply check out tanks ahead of time and dive at your leisure. Night diving from a boat is available for six or more people. The bar is open until 1:00 am, so you can even enjoy a late snack when the dive is over.

A large saltwater pool, with a passage to the sea, has been cut into the iron-shore. Smooth cement walkways connect the pool to the resort so it's convenient to use. The pool is an excellent place for scuba or snorkeling instruction or for a warm-up dive. When you're ready, you can swim through the cut to the ocean.

If you want a diving vacation, Bonnie, Adrien and Sunset House are a delightful combination. While researching this article, we were so impressed we decided to move the Jim and Cathy Church U/W Photography Courses to Sunset House in 1986. For more information about the resort, write to: Sally Caldicott, Sunset House, P.O. Box 479 Church Street, Grand Cayman, British West Indies; phone toll free (800) 982-9801 or direct to Grand Cayman, (809) 949-5966. For information about the Jim & Cathy Church U/W Photo Courses, write to Jim and Cathy Church, P.O. Box 80, Gilroy, CA 95021-0080; phone (408) 842-9682.

KICK UP YOUR HEELS IN HAWAII

Complete packages available from Hawaii's 24 best dive shops.



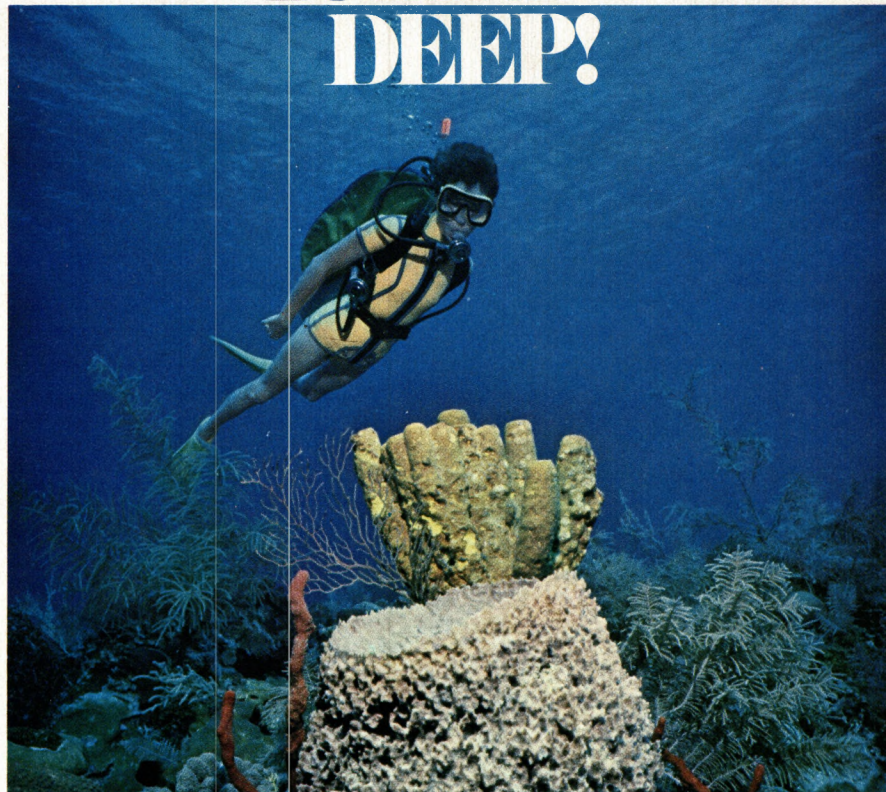
NAME _____
ADDRESS _____
CITY/STATE/ZIP _____
I'd like to Kick Up My Heels on:
Oahu, Kauai, Maui, Big Island (circle one or more) Hawaii's 24 Best Dive Shops

DESTINATION HAWAII

P.O. Box 90295 SDM
Honolulu, Hawaii 96835

circle #171 on Reader Service Card

CAYMAN ISLANDS DEEP!



"Those who know us, love us."

Those who know us, know the pleasure of diving into our incredibly clear, turquoise waters. The thrill of discovering an underwater wonderland, bursting with colorful marine life and splendid coral reefs. And the excitement of exploring underwater caves and ancient shipwrecks. The Cayman Islands are a magical trio of islands, nestled in the British Caribbean. The whole world doesn't know about us. But those who do, love our home as a diving paradise.



With people whose warmth and attentiveness make a vacation here an unforgettable one. Getting here is easy, just over an hour from Miami, two and a half hours from Houston, via frequent 727 jet service on Cayman Airways. Come to The Cayman Islands to snorkel in our sunny, shallow reefs. And dive into our mysterious depths. Call your travel agent or Cayman Islands Department of Tourism. Our enthusiasm for divers runs very deep!

CAYMAN ISLANDS



Department of Tourism Sales Offices: Miami/Houston/Los Angeles/New York/Chicago/Dallas/Toronto/London

circle #172 on Reader Service Card

MOVING?

DON'T MISS A SINGLE ISSUE OF SKIN DIVER

Let us know your new address right away. Attach an old mailing label in the space provided and print your new address where indicated.

QUESTION ABOUT YOUR SUBSCRIPTION?

When you write, be sure to include a label. It helps us serve you more promptly.

TO SUBSCRIBE OR EXTEND YOUR SUBSCRIPTION-

Check the appropriate boxes below:

- ☐ New subscription. Please allow 4-8 weeks for your first copy to be mailed. ☐ Renewal subscription. Please include a current address label to insure prompt and proper extension.
☐ 1-year \$13.94. This rate limited to the U.S.A. and its Possessions. ☐ Payment enclosed or ☐ Bill me.

MAIL TO: SKIN DIVER

6725 Sunset Blvd., P.O. Box 3295, Los Angeles, CA 90078

Name _____
Address _____
City _____ State _____ Zip _____

ATTACH LABEL HERE

(If label is not handy, print OLD address in this space.)

The Divers' Express

Special Non-Stop Jet Flights To Cayman

TEXT AND PHOTOGRAPHY BY GERI MURPHY

"The Express is back!" This announcement signals the beginning of another season for one of Grand Cayman's most exciting programs.

It means the Cayman Express is about to kick off its third season of non-stop charter flights from northern U.S. cities. This is particularly good news for divers who have to lug their dive gear and U/W cameras aboard southbound vacation flights. Beginning in late December and running through early April, divers will be able to fly straight into Grand Cayman from Detroit, Chicago and New York.

Cayman Express is a remarkably unique concept developed by the imaginative mind of Don Messick, a Cayman Island hotel/resort entrepreneur. Recognizing the need for convenient, direct air service to the island, Messick invested his personal money and energy into the creation of a charter company that offers easy-to-book, one week round trip vacations at 14 locations in the Cayman Islands. It's become one of the most successful charter programs in the Caribbean and has the full blessing of the Cayman government.

In technical travel terms, Cayman Express is a combination charter flight service and tour operator. In layman terms, this means you can purchase a variety of different vacation packages, ranging from a round trip airline ticket to a complete air ticket/hotel/diving vacation—take your pick.

What makes Cayman Express unique is the fact they use standard Cayman Airways 727-200 Boeing jets. These are not your typical jammed/crammed charter aircraft with spartan service. Instead, Cayman Express offers regular first class and coach seating plus great in-flight service. On board entertainment includes fashion shows, give-away prizes and a champagne brunch on the return trip.

Messick started the Cayman Express in 1983. The first winter season (1983/1984) the charter service operated from New York to Cayman.

During the 1984/1985 season, Cay-

man Express became a joint venture with the Holiday Inn and expanded its service to include Chicago. During that season, the Express carried a total of 3,000 passengers to Grand Cayman.

Executive vice-president Paul Robinson estimates that at least one-third of all Cayman Express passengers traveling last season were divers. The advantages of non-stop flights and low air fare are especially attractive to divers. And, Grand Cayman is considered one of the top dive resort areas in the Caribbean.

This season (1985/1986 winter) Cayman Express has once again expanded its scope of service to include Detroit, Chicago and New York. It flies weekends only, running one week, back-to-back vacation charters at bargain rates.

Here is how the program works. Information and reservations for Cayman Express trips can only be obtained from your local dive shop, travel agent or the Cayman Express reservation office in Memphis, TN. Business is conducted by telephone. You simply call the U.S. toll free number: (800) 247-9900. If you live in Tennessee, call (901) 767-0140.

Call during normal office hours, 8:00 am to 5:30 pm (Central Time), Mondays through Fridays. The people answering the phones are extremely knowledgeable. They have all been to Cayman and are acquainted with the services available. You can obtain prices, available dates and even request a brochure be sent to your home.

The Cayman Express season runs from December 20 to April 13. These dates vary one to two days depending on the city of departure. Please keep in mind this is a seasonal program, so plan your vacation accordingly. Incidentally, book your vacation dates soon since seating on these special flights is limited. There is only one flight per week from each city and the aircraft carries 157 passengers.

The Cayman Express departs on certain days from specific cities. Detroit departures are always on Fridays, Chicago flights on Saturdays and New York de-

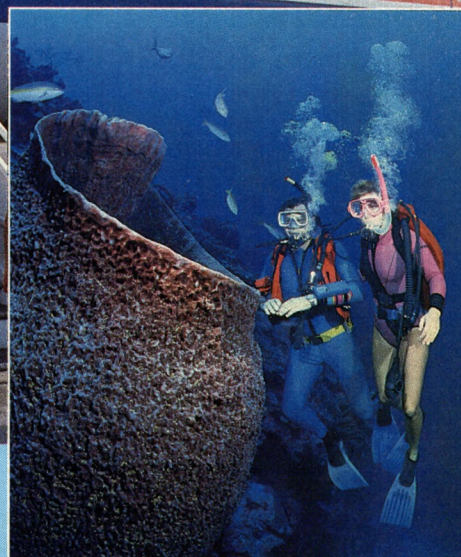
partures are always scheduled for Sundays. The return flight is on the same day one week later. Although these charter flights are somewhat restrictive in the departure schedule the money saved makes them well worth it. The price of Cayman Express charter flights is substantially lower than scheduled airline service, often amounting to a 30 to 50 percent savings. How is this possible? By running a high tech computer operation with a small, highly skilled staff, Cayman Express greatly reduces its overhead. The price of a round trip flight is \$399 from Detroit, Chicago or New York. There are also special "bargain weeks" in January when the price is further discounted to \$299. In addition to the dollar savings, divers enjoy the convenience of direct service—no layovers, no baggage transfers and shorter travel time.

Should you choose, you can also purchase hotel or condo accommodations at the same time you buy your Cayman Express ticket. A total of 14 different hotels and condominiums have joined the Cayman Express promotion program. These include many of the top properties on the island. These services are also offered at special discounted rates and the diver can obtain even greater savings.

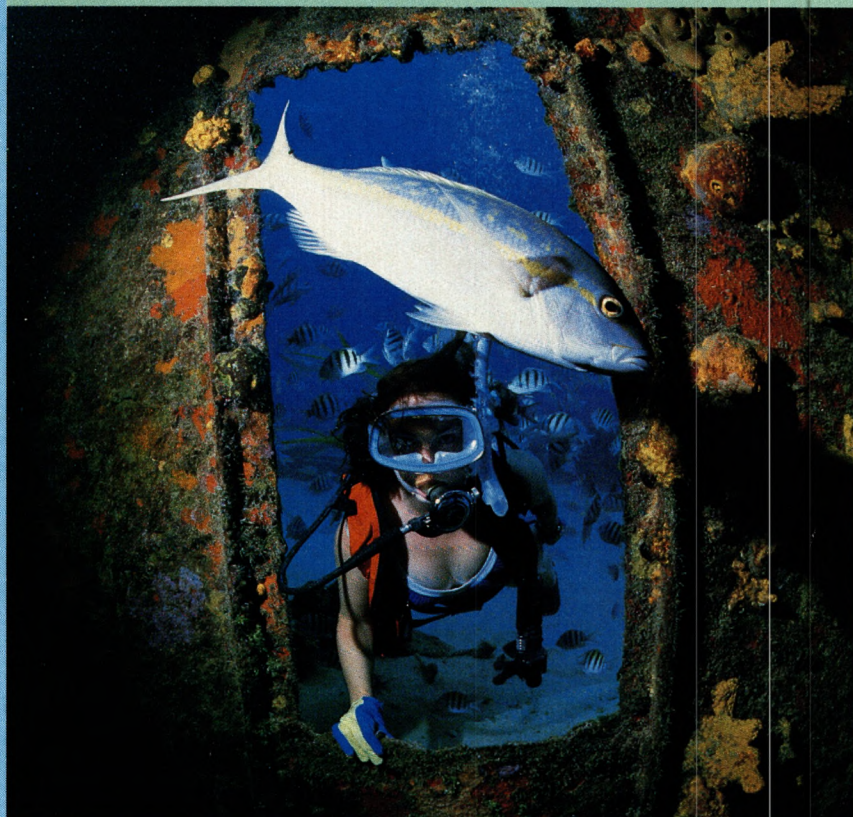
This year a dive package has been added to the Cayman Express menu selection. It is called the Express Diver. It consists of six, two tank morning dives and one night dive. All dives are conducted on drop-offs, coral reefs and wrecks along the Seven Mile Beach area. The special Cayman Express dive package sells for \$229 and is operated by Bob So-to's Diving Limited.

Add it all up and Cayman Express spells out a convenient, inexpensive winter vacation at one of the Caribbean's best diving locations.

For more information, brochures and reservations contact: Cayman Express Limited, 5100 Poplar Ave., Suite 2216, Memphis, TN 38137; or telephone, U.S. toll free, (800) 247-9900 or in Tennessee, (901) 767-0140. 



Top: Cayman Express offers non-stop charter flights from Detroit, Chicago or New York to Grand Cayman aboard Cayman Airways 727-200 jets. Grand Cayman is one of the top resort areas in the Caribbean and the U/W sites include wrecks (below), reefs with huge barrel sponges (right) and drop-offs.



CAYMAN EXPRESS 1985/1986 FLIGHT SCHEDULE

DETROIT—Fridays—Dec. 20 to April 11
Depart Detroit 12:30 pm/Arrv. Cayman 4:00 pm
Depart Cayman 8:00 am/Arrv. Detroit 11:30 am

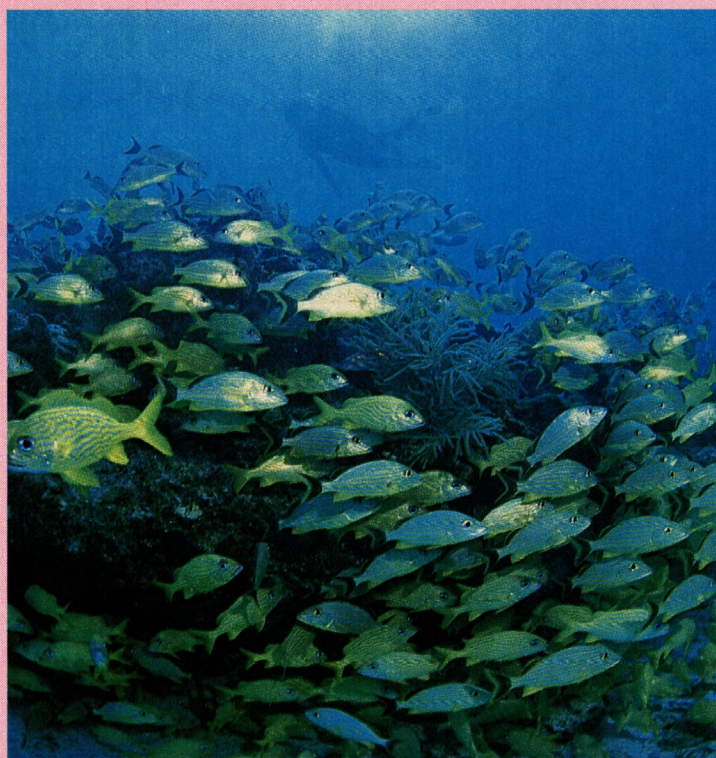
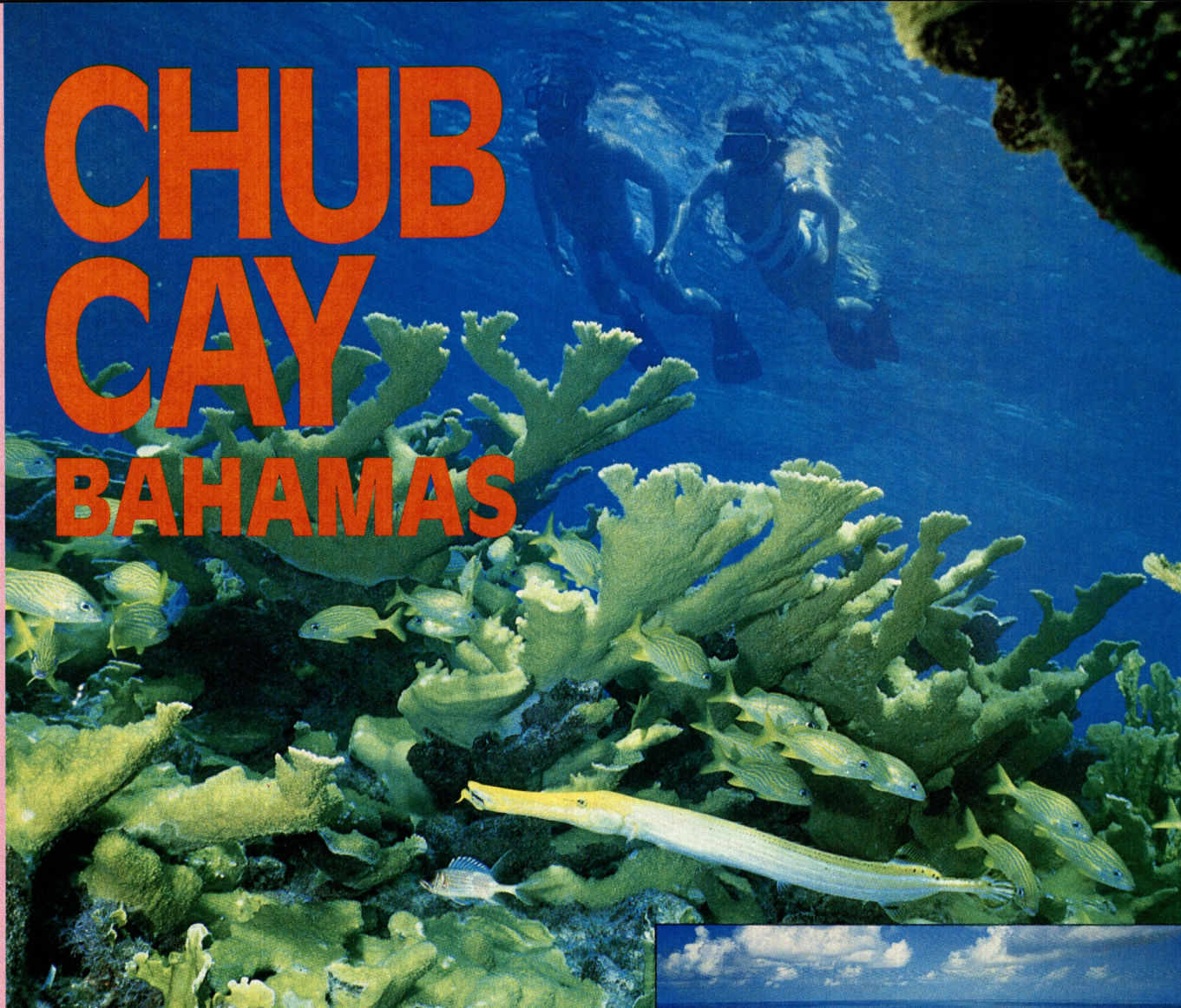
CHICAGO—Saturdays—Dec. 21 to April 12
Depart Chicago 10:30 am/Arrv. Cayman 3:00 pm
Depart Cayman 7:00 am/Arrv. Chicago 9:30 am

NEW YORK—Sundays—Dec. 22 to April 13
Depart NY 11:00 am/Arrv. Cayman 2:15 pm
Depart Cayman 7:00 am/Arrv. NY 10:00 am

PARTICIPATING HOTELS/CONDOS

Beach Club Colony
Brac Reef Beach Resort
Cayman Diving Lodge
Cayman Islander
Cayman Kai Resort
Grand Pavillion
Holiday Inn Grand Cayman
Lime Tree Bay
London House
Plantana
Plantation Village
The Retreat
Tarquynn Manor
Villa Caribe Hotel

CHUB CAY BAHAMAS



Top: Bill and Julianne Zieffe snorkel over elkhorn coral.
Above: An aerial view of Chub Cay and its 76 slip marina.
Left: Cindy Gray at Canyons and Caves.
Below: Neal Watson of Chub Cay Undersea Adventures.



I didn't coin the phrase "Fishbowl of the Bahamas," Rick Frehsee used it in *SKIN DIVER* in July 1981. However, now I have visited Chub Cay, I can see it is an appropriate appellation. The corals and the sponge life are impressive, the wall diving is dramatic and the diver convenience is superb. But in retrospect, it is surely the abundant and diverse marine life that best defines the Chub Cay underwater experience.

While divers are just beginning to become aware of the quality of diving to be found off Chub Cay, sport fishermen have been visiting the Chub Cay Club for near-

amenities include: landscaped grounds; fuel dock; laundromat; screened in fish cleaning room; a well stocked commissary; dockside dive shop with air fills, scuba and snorkel gear rental and sales and underwater camera rentals and sales. Chub Cay is a luxuriously snug harbor for visiting mariners.

The hotel is just steps away from the dive shop and features clean and comfortable air-conditioned rooms equipped with color cable TV, refrigerator and private bath. The freshwater swimming pool is just outside the guest rooms and the Flying Bridge restaurant and lounge is

racks, dive platform and all the various accessories you might expect of a professional dive boat. There are more than 100 aluminum cylinders and enough complete sets of scuba gear to fully equip 40 divers. With the two compressors, 50,000 cubic feet of air storage, the boats and the rental gear, Chub Cay Undersea Adventures is more than equipped to handle the full occupancy provided by the hotel's 20 rooms. In addition, there is E-6 film processing, classroom facilities and camera and strobe rentals in recognition of the high percentage of underwater photographers among the Chub

Hideaway For Fish Lovers

TEXT AND PHOTOGRAPHY
BY STEPHEN FRINK

ly 25 years. Chub Cay is a relatively small island at the southern tip of the Berry Island chain in the Bahamas. It is adjacent to the Tongue of the Ocean, an undersea abyss famed for magnificent pelagic life and startling water clarity. The sheer quantity of marine life and the quality of the fishing established a clientele for the Chub Cay Club in the early years. It has evolved into a first class hotel and marina and now, with the addition of Neal Watson's expertise, the dive services are steadily expanding as well.

Neal Watson has become famous in the dive industry, not only for his daring personal exploits and charisma, but also for his sound business acumen. One of the principles that has made his dive operations on Bimini and Andros so successful—and is now at work in Chub Cay—is the concept of complete packaging of an entire vacation. A single phone call can arrange air travel, hotel accommodations, meals and diving. There are no surprises or hidden charges in these packages, even gratuities and ground transportation are included. The only additional expenses that might be incurred are the \$5 Bahamian and \$3 U.S. departure taxes and of course bar bills or purchases from the hotel gift shop.

The package generally includes airline service from Ft. Lauderdale on various twin engine Atlantic Coastal Airways aircraft. The flight is only 125 miles long and takes about an hour. There is a 5,000 foot runway with customs port of entry at Chub Cay. It is a popular destination for private pilots as well. Chub Cay is only 30 miles from Nassau and it is also possible to book charter flights between the two islands. A call to Undersea Adventures toll free reservation line is the best bet to clarify any travel questions.

Chub Cay is also very popular with boating enthusiasts and during the summer boating season, the large 76 slip facility is often filled to capacity. With a deep nine foot draft, its spectacular

equally close and convenient. There are beaches to stroll, bicycles to rent, daily deepsea and bonefish charters and tennis to play on two lighted all-weather courts. But, for most of the guests of the Chub Cay Club, it is the excitement of superior scuba diving and a safe professional dive operation that provide the incentive to visit.

Since August 1, 1985 the Chub Cay Club has been part of Neal Watson's expanding Bahamas dive domain. Many of the recent guests were former clients who enjoyed the degree of service and commitment to fine diving evidenced in Bimini and Andros. With more than 10 years of experience in Bahamas resort diving and more than 50,000 guests, Neal Watson and his crew of dive professionals have determined that the bulk of their business comes from dedicated divers who wish to maximize their time in the water. To that end, the travel packages have been coordinated so that two dives may be made on the day of arrival, three dives per day during the vacation as well as the occasional night dive and two dives on the day of departure. The dives on the departure day are at the discretion of the diver, but since the return flight is at an altitude not exceeding 4,000 feet, decompression has not been a concern. Neal stresses however, that these dives, like all scheduled dives, are purely optional. These are not regimented endurance tests. For the guest who wishes to take the afternoon off, the Chub Cay Club features numerous non-diving diversions.

The dive boats are moored directly in front of the dive shop and full tanks are loaded on the boats before every dive, thereby insulating guests from the tank toting drudgery. The appropriately named *Photo One* is a 40 foot custom tri-hull flat-top powered by two outboards and set up with a center photo table, freshwater camera rinse and an air gun for camera maintenance. The second dive boat is a 30 foot custom V-hull diesel with tank

Cay guest list. Last summer Chub Cay hosted underwater photo schools by both Gale Livers of Ikelite and Paul Tzimoulis of *SKIN DIVER*, a fact that may be considered testament to the quality of the underwater photographic potential and the convenience of dive sites not more than 15 minutes away by boat.

Like many of the finest Caribbean destinations, Chub Cay diving is characterized by a shallow reef, an intermediate reef and a wall. The wall starts at 80 to 90 feet and is quite vertical and adorned by massive tube sponges, orange elephant ear sponges at the lip, heavy concentrations of black coral and magnificent populations of pelagic species. The Chub Cay Wall is a predictable cruising ground for eagle rays, turtles, large barracuda, amberjack and horse-eye jack. While the depth of the wall dive doesn't afford much bottom time, its excitement and diversity can cram a week's worth of exhilaration into 20 minutes.

The intermediate reef is the ideal environment for fish activity. The reef generally consists of dense, high profile corals either in a honeycomb or spur and groove configuration. It is packed with both fish and invertebrate life. An example of this type of reef is Oasis, which has been developed into a fish feeding station with congregations of Nassau and tiger grouper, Bermuda chub, Atlantic spadefish, coneys, chromis and even a playfully tame nurse shark often in attendance. Canyons and Caves is equally exciting for the fish photographer with depths in the shallow sand flats at 15 feet and a fairly vertical coral face dropping from 20 to 40 feet. Here may be found a wide variety of angelfish, spadefish, barracuda, baitfish, grouper, sergeant major, Bermuda chub, triggerfish, moray eels and many other Caribbean tropicals in generally calm water with visibility often exceeding 100 feet.

There is plenty of shallow reef suitable for both scuba or snorkel around Chub

NON-STOP FUN!



... ON THE **CAYMAN EXPRESS**

- CHICAGO SATURDAY TO SAT.
- DETROIT FRIDAY TO FRIDAY
- NEW YORK SUNDAY TO SUNDAY

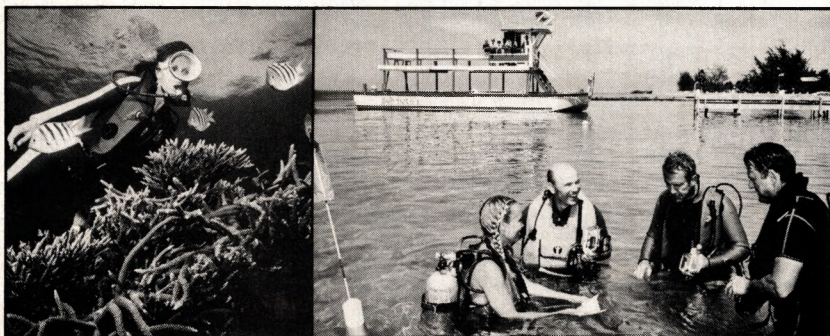
- WIDE SELECTION OF HOTEL AND CONDOMINIUM VACATIONS AVAIL.
- AIR ONLY SEATS AVAILABLE

JANUARY \$299⁰⁰ DEC/FEB/MAR \$399⁰⁰

BOB SOTO'S EXPRESS DIVER PACKAGE

- SIX TWO TANK A.M. DIVES AND ONE NIGHT DIVE AT ALL SEVEN MILE BEACH LOCATIONS.
- TRANSPORTATION FURNISHED.

\$229⁰⁰



TOLL FREE 1-800-247-9900
IN TENNESSEE: (901) 767-0140

PROGRAM BEGINS ON
DEC. 20, 1985

circle #173 on Reader Service Card

Dive the Florida Keys . . .

Let our expert guides on fully-equipped vessels help you locate unmolested, uncrowded reefs in the sparkling waters of the Florida Keys!

Discover Hawk's Cay . . .

A gracious, luxury resort on a secluded 60-acre tropical island with abundant recreational facilities, full-service marina, 4 restaurants, 2 lounges, disco . . .

Special Offer Includes . . .

Spacious guestroom for 4 days/3 nights. Lavish breakfast buffet each morning. Three two-tank dives with tanks, air, weights and backpack. Unlimited snorkeling. Transportation to/from Marathon Airport.

\$199*

Per Person
Double Occupancy
* Not including taxes



For more information and reservations,
call your travel agent or



Hawk's Cay
Resort & Marina

800-327-7775
(In Florida, 800-432-2242)

Mile Marker 61
Marathon, Florida



— The Keys' Only —



circle #174 on Reader Service Card

CHUB CAY

Cay as well, although Mama Rhoda Reef is probably the best known and most requested dive site. Here we snorkeled among pristine elkhorn coral heads within a foot of the surface and plunged down to the sand flats at 15 feet to examine conch and starfish. From the air, Mama Rhoda Reef is an extensive spur and groove formation at right angles to Mama Rhoda Rock, just a few hundred yards offshore Chub Cay. But once beneath the surface with mask and fins there is no need to explore all of the massive reef structure, for hours of fascination exist in each small coral vignette.

Chub Cay Undersea Adventures has a lot going for it. Clear water, U/W photo facilities, lots of fish, good topside accommodations, warm weather and a very professional dive operation. I predict another winner for Neal Watson.

For further information please contact, Chub Cay Undersea Adventures, P.O. Box 21766, Ft. Lauderdale, Florida 33335-1766 or phone toll free (800) 327-8150. In Florida, please call collect (305) 763-2188. ✕

REGENCY YACHT

(Continued from Page 77)

dive sites. We utilized this service to make a night dive on the *Rhone* and enjoyed not only the dive, but the courtesy and professionalism of Bob Stafford and the Underwater Safaris crew.

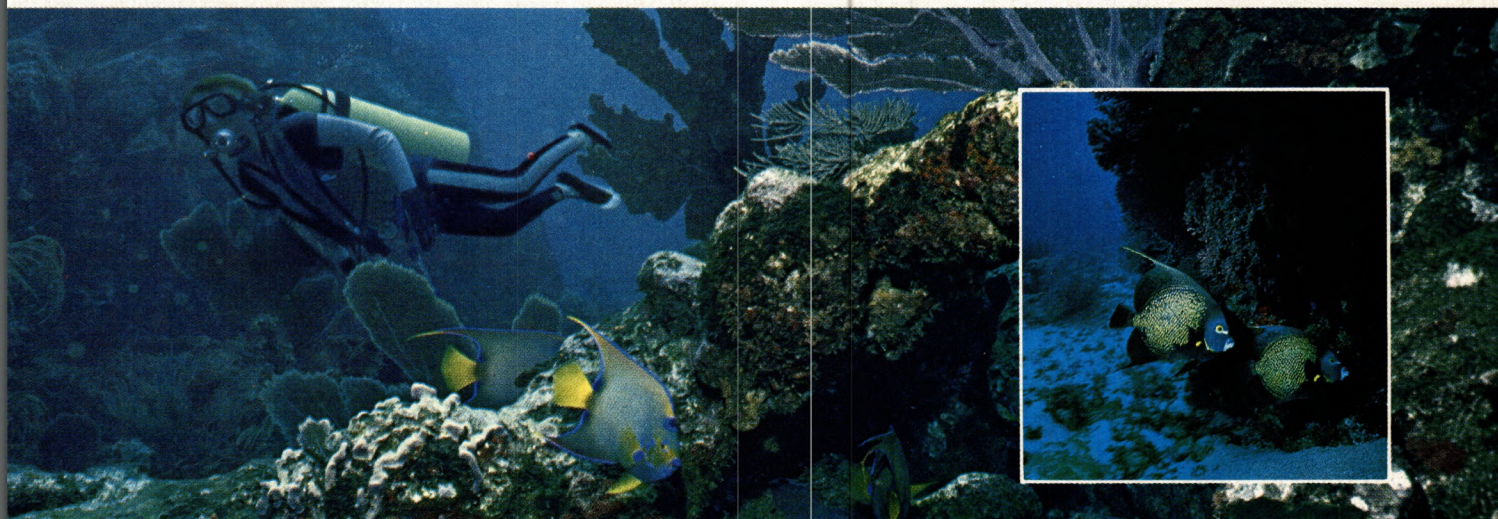
The other dive options include entries directly from the *Flute* or in instances where sea conditions prohibit the big boat from getting close to the site, dives may be made from the inflatable chase boat. Rik and Lee Ann are enthusiastic and very safety conscious. The impression I got was that the whole dive aspect of the charter experience is operated efficiently, reliably and safely.

Sail and power boats are distinctly different experiences and each will appeal to a different clientele. While *La Buscadora* and *Flute* are different, in many regards they are the same. Both are crewed by helpful, courteous and interesting individuals; and each crew seems very dedicated to providing a superior vacation experience to its guests. Both yachts offer luxury, excellent food and a commitment to diving that stems from their guests' desires and the crew's own interests. And, both may be booked through a toll-free call to Regency International Yacht Charters in St. Thomas.

For further information, phone (800) 524-7676 or write to the Caribbean Division of Regency International, Virgin Islands Water Safaris, Long Bay Road, St. Thomas, USVI 00802. In the Virgin Islands phone (809) 774-5950. ✕

TRINIDAD & TOBAGO

Discover a world
the world hasn't discovered.



For those of you who wouldn't dream of taking a vacation without your scuba gear, discover Trinidad & Tobago.

Over 300 species of fish grow up big and beautiful in our warm, blue waters.

They grow up just a little vain, too. So there's always a Silver Moonfish, a Skipjack or a Blue-Striped Grunt boastfully flashing a fin or two at you.

At Grouper Ground in Tobago, you'll even have the more daring Groupers

literally eating out of your hand.

And if that isn't enough, spectacular shallow, drift and wall dives await you at some of the best dive sites in the Caribbean.

Scuba schools in Trinidad & Tobago offer diplomas and certificates for both beginners and experienced divers. Their qualified P.A.D.I. instructors will guide you to shipwrecks and schools of fish grazing in dazzling

coral pastures.

So dive into a world of scuba adventure. Discover a world the world hasn't discovered—Trinidad & Tobago.

circle #175 on Reader Service Card



TRINIDAD & TOBAGO

Come discover a world the world hasn't discovered.

RON KIPP'S

Bob Soto's

We take your fun very seriously

"Only Soto's has the size and staff to serve individuals or groups with equal grace and hospitality."

—Rick Frehsee,
underwater photographer

- Dive the best sites
- Safe diving is more than a slogan
- More fun with Bob Soto's friendly people
- SERVICE, not surprises
- 5 shops, 7 boats, 34 staff



CAYMAN DIVING LODGE 1-800-262-7686
HOLIDAY INN 1-800-421-9999
CAYMAN ISLANDER 1-800-327-3835

P.O. Box 1801
Grand Cayman, B.W.I. 800-262-7686



This year Fort Lauderdale became the envy of every dive destination in Florida and the Caribbean. It became the proud owner of one of the most famous shipwrecks in recent maritime history.

While it may be smaller in stature, the *Mercedes I* is one of the few ships to equal the public notoriety of the *Andrea Doria*. She has been seen by an estimated 100 million television viewers and she is the only ship to attract more than 20,000 spectators to her official sinking.

In a period of four months this ship became somewhat of a local folk hero to the residents of South Florida. Now she has ascended to the honored position of diving's most popular shipwreck. The *Mercedes I* is a celebrity.

THE MERCEDES I

Fort Lauderdale's Pride Of The Shipwreck Fleet

TEXT AND PHOTOGRAPHY BY GERI MURPHY



Opposite page: Andy Aleff swims by the *Mercedes I*. Above: A diver photographs a barracuda. Above right: Many arrowcrabs live on the wreck. Right: The dive boat *Experience* heads out to the *Mercedes I*. Far right: Bill Cole, skipper of *Pro Dive*.

EARLY HISTORY

The *Mercedes I* is 34 years old. She was designed and built in Hamburg, Germany. Constructed as a typical European coastal freighter, the ship was launched in 1951.

Her design was simple but efficient. The steel hull measured 197 feet in length with two giant cargo holds dominating two-thirds of her forward section and a pilot house and crew's quarters occupying the stern.

The *Mercedes I* began its maritime career freighting general cargo between European ports in the North Sea area. Eventually, she was sold to a Venezuelan firm, Navieras del Caribe of Caracas.

PALM BEACH BEACHING

The *Mercedes* would have probably lived out her life in obscurity had it not been for a fateful storm on Thanksgiving



day weekend of last year. On Friday, November 23, 1984, the *Mercedes I* was torn loose from her anchorage and swept shoreward in a violent storm. She ended up high on the beach, next to the pool of an oceanside mansion owned by Palm Beach socialite Mollie Wilmot.

The freak location of this oddball shipwreck captured the attention of Ameri-

ca's television networks and news media. The ship was high and dry on the beach.

Media coverage continued to intensify as the stubborn ship refused to budge. Weeks turned into months as salvage specialists toiled with the problem of removing the *Mercedes I* from its Palm Beach perch. One hundred five days after her stranding the shipwreck was final-



photo/Mark M. Lawrence

ly dislodged by the Donjon Marine Company, a New Jersey salvage company. The job cost \$223,000 and was paid for from a Federal fund for oil spill prevention and control. This fund was created by federal tariffs on petroleum shippers and port terminals.

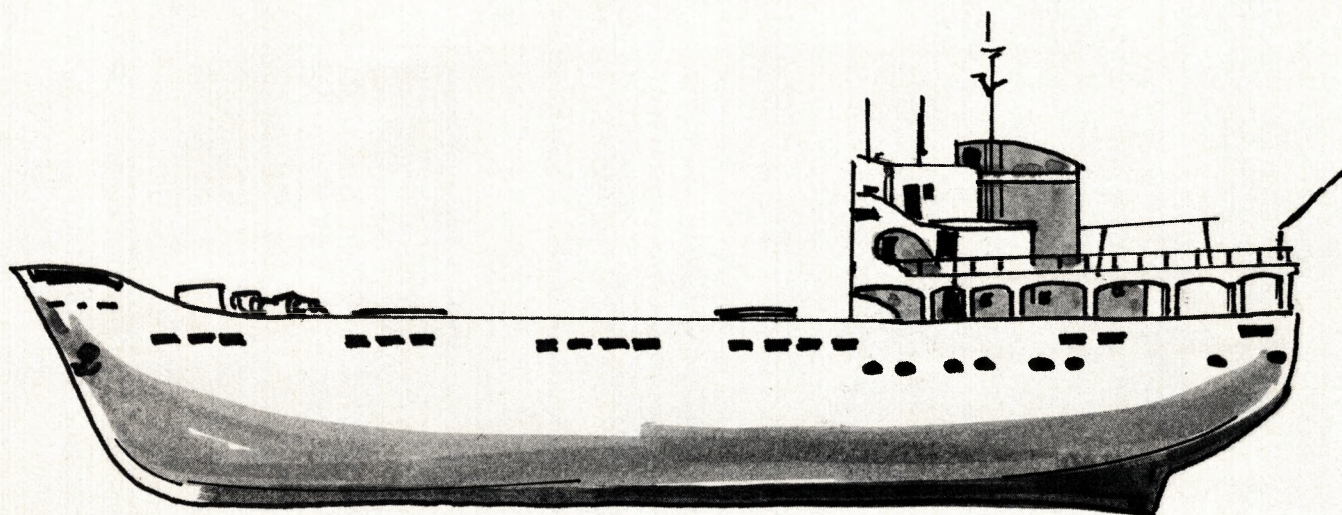
FINAL VOYAGE

In a surprise move, the salvaged hulk

of the *Mercedes* was purchased from Donjon for \$29,000 and towed to Fort Lauderdale. Fort Lauderdale wanted the shipwreck more than the residents of Palm Beach. Arrangements for this transaction were orchestrated by Steve Summerville, artificial reef coordinator for the Broward County Environmental Quality Control Board. Summerville's job is the

creation of artificial reefs by sinking ships and barges off the Ft. Lauderdale coastline. The *Mercedes I* was purchased with money from the Florida Boating Improvement Fund, created from state boat registration fees.

News of the *Mercedes I* purchase quickly spread and the community pitched in. The Fort Lauderdale Port Au-



The 197 foot long freighter *Mercedes I* was 34 years old when she washed up on the beach in a wealthy Palm Beach neighborhood. The ship was towed to Ft. Lauderdale, where local divers donated their time to clean her up. On March 30 this year the *Mercedes I* was towed out to sea and sunk off Ft. Lauderdale beach in 97 feet of water. Today she serves as an artificial reef.

thority donated dockage space for the time needed to prepare the ship to be an artificial reef. Fort Lauderdale area dive stores donated cash for cleaning materials and tools. The South Florida Scuba Divers Club donated 2,000 man hours to the actual cleanup of the ship and the removal of dangerous debris. The ship was stripped down and hatch covers were removed. Large exit holes were cut in her sides and interior bulkheads to prevent diver entrapment. The final touch was painting exit areas inside the vessel, pointing the way out for divers.

On March 30, 1985 the *Mercedes I* was towed out to sea and positioned directly in front of the main length of Fort Lauderdale beach. Preparations for the final send-off were arranged by the Broward County Bomb and Arson Squad that carefully placed 350 pounds of TNT in strategic locations throughout the hull of the ship.

While 500 boats and 20,000 spectators looked on, the *Mercedes I* went to the bottom in a sheet of flames and a plume of smoke. It was a most spectacular climax to South Florida's greatest maritime saga.

THE WRECK TODAY

Today, the *Mercedes I* rests quietly on the seafloor, one mile offshore Fort Lauderdale. Her short lived television career has come to an end. The ship has now begun another chapter, serving as an artificial reef for a multitude of schooling fish and marine life.

The wreck is approximately 1.2 miles north of the intersection of Sunrise Boulevard and Route A1A—right in the middle of Fort Lauderdale's fantastic, six mile long sandy beach. She is within clear sight of the city's skyline of highrise hotels and condominiums. In fact, I could actually see the location of the *Mercedes*

from my hotel room window at the Holiday Inn/Ft. Lauderdale Beach. It seems everyone is cashing in on the new shipwreck bonanza and Holiday Inn is no exception. This 12 story highrise beach hotel now offers a special *Mercedes* dive package that includes room, breakfast and two dives per day. It includes free transportation from the hotel to the dive boat, plus tanks, backpacks and weight-belt. In order to book this package the diver simply calls (800) 772-3483.

The ship lies in 97 feet of water on a sand and coral bottom just east of Fort Lauderdale's coral reef line. She sits perfectly upright, almost as though she were at anchor. On a clear day, snorkelers can see the wreck from the surface.

Charter boats from several Fort Lauderdale dive shops, plus a number of independent dive charter boats run regular trips to the *Mercedes*. Hardly a day goes by without at least one dive boat anchoring over the wreck.

For my visit I chose to dive from the *Pro Diver*, a 42 foot custom built boat operated by Capt. Bill Cole of Professional Dive Schools of Florida. This dive shop has two branches; one in Pompano Beach and one at the Bahia Mar Yachting Center in Fort Lauderdale. The store management schedules at least five dives weekly on the *Mercedes I*, from Tuesday through Sunday. The *Pro Diver* and her sister ship, *Experience*, have made more than 300 visits to the *Mercedes I* so far.

Diving conditions on the *Mercedes* can vary considerably. Visibility can range from poor to excellent, depending greatly on the tide, currents and surface conditions. A poor day on the wreck might yield only 30 foot visibility, while a good day could result in 100 feet. Average visibility is generally 50 to 60 feet.

Perhaps the trickiest part of diving this

wreck is the current. On some days, there is none whatsoever, while on other occasions there might be a strong current on the surface and a moderate one on the wreck. I made four dives on the *Mercedes I* over a four day period and encountered a strong current on only one occasion. It takes an experienced skipper to determine where to anchor the boat and how to dive the wreck. Sometimes it is a drift dive, especially when the current is running strong.

MARINE LIFE

Each of my four visits revealed another facet of this intriguing wreck. It was hard to believe that a simple steel hulk could become such a storehouse of marine life.

The wreck lies parallel to the beach with its bow pointed north. Quite often, the current flows from north to south, as the *Mercedes I* is in an eddy current loop. I found the current works in favor of the divers, as it helps to attract great numbers of schooling baitfish. These, in turn, attract predators such as jacks, bonito and barracuda.

Descending the anchor line, my first glimpse of the *Mercedes I* was a ship enveloped in a cloud of swirling baitfish. The entire stern seemed to be alive with four inch silversides. Several formations of bluerunner jacks cruised above the baitfish, poised in a feeding mode. As I settled beside the stern rail, the action began. The jacks would dash into the churning mass of baitfish, picking off slower moving victims. They repeated this tactic over and over again, gorging themselves on the shipwreck smorgasbord. I must have watched this ritual for a full five minutes, mesmerized by the speed and fury of the feeding jacks.

The decks of the *Mercedes I* are now carpeted with a layer of algae and en-

crusting marine life. I was amazed at the incredible abundance of arrowcrabs, which seemed to inhabit every crevice and corner of the deck. There were hundreds of them and I made a mental note to return to the wreck with a macro framer on my next visit.

The outside of the wreck seemed to be the most appealing for this is where all of the fish and marine life congregated. In addition to five large schools of baitfish, I encountered queen angelfish, midnight parrotfish, creole wrasse, French angel-fish, orange filefish, rock hind and many other tropical reef species. The *Mercedes* / has become a magnet for marine life.

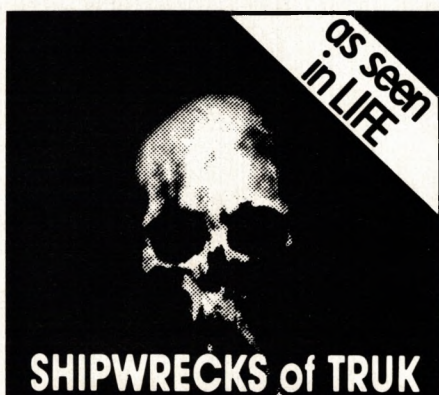
Perhaps the most fascinating occupants of the *Mercedes* / are the barracuda. At least four or five of these stately creatures inhabit various parts of the ship. The smaller ones seem to like cruising the quiet zones of the wreck's cargo hold and wheelhouse.

The king of the wreck is a four and one-half foot barracuda that hovers just above the ship's bow. This proud creature appears unafraid of divers and is the easiest to photograph. I found I could approach to within two feet of this splendid fish without forcing him to retreat. At first, I thought this 'coda encounter was a lucky fluke. Yet when I returned on the next

day's dive, he was still there—maintaining a vigil in the exact same spot.

My last dive on the *Mercedes* / was nostalgic. It was like saying goodbye to an old friend. Each dive had been better than the last, as the weather and visibility had continually improved. I had also come to know the wreck very well and discovered that each group of fish had its own area of wreck real estate.

As I started up the anchor line for the last time, it occurred to me that the *Mercedes* / had fulfilled its destiny. It had become precisely what everyone had hoped—an absolutely splendid artificial reef. 



"A beautiful book" Pamela Kerr, TIME-LIFE

"...an ironic look at war, a profound comment on its ultimate insignificance."
Julia Scully, Modern Photography

By Philip Alan Rosenberg
102 Pages, 9 1/2 by 10 inches
60 color photos, softcover
\$16.50 Postpaid Bilingual, Japanese-English

Send check to: MICRONESIAN SEMINAR
Box 1351, Kealakekua, HI 96750
ALLOW 4 - 6 WEEKS FOR DELIVERY

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Mike Kevorkian's SWIMWEAR SPECIALISTS (est. 1956)

Men's Bikinis
• Fast drying nylon lycra
• Solid colors (black, blue, navy, brown, maroon) and exotic prints.

• 1" sides, double front in S, M, L, XL (\$9.95 — 3 for \$25)
• 1/2" clip-on sides, one size fits all (\$14.95 — 2 for \$25)

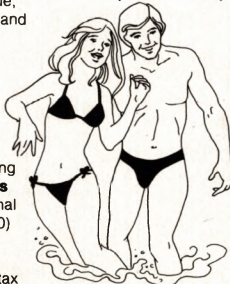
• \$2 postage and handling
Women's String Bikinis

• Beautifully styled minimal brief. \$16.95 (2 for \$30) plus \$2.00 postage and handling

Fla. res. add 5% sales tax

TARPOON SKIN DIVING CENTER
3200 Palm Ave., Hialeah, FL 33012 (305) 887-8726

State law prohibits the return of intimate apparel



PRO DIVE FLORIDA'S GOLD COAST



Photography by Mark M. Lawrence

DIVE THE "MERCEDES"

DIVE PACKAGE INCLUDES:

- Panoramic ocean view room • Free welcome cocktail
- Full divers breakfast • Half day charter aboard the "PRO DIVER" including 2 dives on wrecks or reefs.
- Tanks, back pack, weight belt • Refreshments on board

\$89.00
single occupancy

Holiday Inn
FT. LAUDERDALE • BEACH

\$69.00
per person
double occupancy

Snorkeling, equipment, lessons, certification and group rates available.

**CALL TOLL FREE
1-800-772-DIVE**

Holiday Inn • Sunrise Blvd. and A1A
999 N. Atlantic Blvd. • Ft. Lauderdale, Florida 33304
Florida and local calls phone: (305) 761-3413



photo/Stephen Frink



photos/Wayne and Karen Brown



Top: Anse Chastanet's 37 units cling to a hillside lush with tropical foliage. The resort overlooks a secluded beach nestled between two rocky bluffs (above left). Above: Wayne and Karen Brown manage Scuba St. Lucia, the efficient dive operation at Anse Chastanet. Exciting marine life can be found just off the beach, such as the trumpetfish the author encounters at left. The cave off West Bluff (above) can be entered in only 20 feet of water.

It was the tail end of the August Dog Days, the dry season for dreams, and a BWIA DC-9 southbound from Miami was delivering me from the doldrums. We flew over a rainbow of islands to a little-known, lush Eastern Caribbean landfall I hoped would be an aquatic Oz.

St. Lucia—pronouncing that sensuous name caused the BWIA flight attendant to sigh when she learned my final destination. "You'll be spoiled after St. Lucia," she promised, her West Indian lilt distinctly wistful.

Nick Troobitscoff, Canadian owner of Anse Chastanet resort, had invited me to be his guest for a week and explore offshore with Scuba St. Lucia. Wayne and Karen Brown, the dive operations management team, would be waiting.

Beneath a canopy of constellations, accompanied by a chorus of tree frogs and crickets, manager Peter Pietruszka greeted we three newcomers, including a couple from Monterey, California, Al and Dee Rader. Like me, they had been pre-enchanted by Anse Chastanet's provocative ads and had come to dive. Peter showed us to our gazebos and promised a surprise outside our windows in the morning—and many more beneath the

fascinating potpourri: primarily divers from California, Arizona, New York, France, Italy and Venezuela.

The main bar and restaurant are perched atop the hill—the resting place after taking 125 steps upward from the Anse Chastanet beach, dive shop and daytime bar and restaurant.

That was a surprise that caused initial panic. But guests who are reasonably fit won't have to worry about collapsing in post-aerobics comas. You don't haul your dive gear: It's delivered to the dive store upon arrival and divers are issued lockers for the week. Most guests scurry eagerly down to the beach by 8:30 am and return around sunset—showers, sustenance and one of the finest offshore cabarets in the Caribbean keep you busy and satiated all day.

Scuba St. Lucia is a model of personalized diving and efficient service. Example: The sign-up board bears only the first names and last initials of diving guests who reserve space for the morning and afternoon one tank boat dives or daily beach dives. Boats are deliberately uncrowded and uncluttered.

Wayne and Karen Brown, Californians who came to Anse Chastanet via Grand

cove Wayne showed me, during that first hour, two things I had never seen: an orange seahorse, easily five inches long and a school of about two dozen squid that came right up to my mask, like whimsical space aliens defending their universe. We found two small octopus; dozens of huge, bushy crinoids; a commune of huge banded coral shrimp at the mouth of a cave in the western cliff; silver rains of sardines and other baitfish. Schools of grunts, goatfish and blue tangs cruised along coral heads decorated with an incredible variety of invertebrates and sponges were everywhere. Within this shallow, quiet world immediately offshore was riotous color and a dizzying assortment of creatures.

I returned from the first dive breathless, with 1,500 psi still left. I could have stayed down for hours.

On our second dive, that afternoon, we took the DV-3Xs on a subsea cruise that covered, Wayne said, the equivalent of three dives, from Fairyland in the west to Turtle Reef in the east, almost the width of the cove.

Also available are boat dives to Anse La Raye, 30 minutes north along the lush coastline or Keyhole Pinnacles, Piton Wall and Superman's Flight—all within a short ride from the beach. Keyhole Pinnacles are three large seamounts, rising from 75 to within 10 feet of the surface—rich, startling visual attractions covered with gorgonians and patrolled by schools of reef fish. The sponge life I saw on all of these dives was stunning: enormous azure vase sponges and their milky white counterparts I'd never seen before. There were huge barrel sponges, rope sponges in every color, squatty yellow tubes and vivid orange elephant ears.

The experience of diving offshore is as much the scenery above water as below. Imagine the feeling of surfacing from a fine dive to face the majestic rise of Gros Piton and Petit Piton, dormant volcanic peaks that tower one-half mile above the colorful town of Soufriere—just a few miles from the volcano. Each short boat ride was a sightseeing cruise.

And, then there was the elephant, which we saw on my fourth dive. Yes—a real African elephant named Bupa, who lives in a secluded estate between the Pitons called Jalousie and thunders down to the beach when the dive boat pulls in, demanding bananas, mangos and other fruity gratuities.

Wayne Brown doubles as photo pro and captured many of the week's creatures on Ektachrome, which he processed in the photo center below the reception area in the main building. This recent addition offers not only overnight E-6 developing, but also Nikonos camera and strobe rentals and photo courses. Both Wayne and Karen are involved not only in the photo center, but also in scuba

Anse St. Lucia Chastanet

BY BARBARA A. CURRIE

Caribbean's surface during the week.

The surprise was Anse Chastanet's sumptuous setting and a spectacular cliff-side view of the Pitons and the Caribbean beyond the volcanic sand cove below.

Even without the outstanding diving I'd discover later, Anse Chastanet qualifies as one of the Caribbean's finest small inns. Set on 400 acres cloaked with coconut palms and a lush array of tropical trees and flowers, the 37 units cling to a hillside overlooking a secluded crescent of beach cradled by the rise of two small rocky bluffs. It's a scene stolen from the South Pacific.

The Anse Chastanet clientele filling those rooms (15 gazebos; 10, one bedroom suites; three, two bedroom suites; and six deluxe suites with private plunge pools) are like the units: upscale, classy—but also simple and unpretentious. During my visit, guests included a

Cayman and Tobago, manage the operation, which is staffed by four divemaster/instructors (all but one St. Lucians) and includes two new Bauer K-14 compressors, 80 aluminum 80s and complete rental equipment. There is a fleet of dive boats: a 34 foot custom flattop; a 32 foot deep V-hull twin screw diesel yacht; a 23 foot Seabird and a 21 foot Dusky.

Available for rent are two Tekna DV-3X high performance diver vehicles for an exhilarating flypast of the reef.

Enough technical information, let's get down to fantasies: Anse Chastanet's reef area immediately offshore supplied so many on my first beach dive, I considered forgetting boat dives for the whole week.

Everyone begins with a beach dive. You walk from the dive shop into the clear, shallow water and, within minutes, find a fine assortment of exotic marine creatures. In the waters of this leeward



Anse Chastanet



Come scuba dive and vacation with us beneath the breathtaking twin mountain peaks of St. Lucia's Gros and Petit Pitons. A tropical forest forms the background to Anse Chastanet, its delightful octagonal gazebos and plantation villas. Located in the middle of a 400 acre estate on a long, soft, sand secluded beach. Anse Chastanet... Truly one of the Caribbean's most beautiful resort settings.

1-800-328-5285

Boat Diving • Walk-In Beach Reef Diving • Night Diving • Scuba Diving Packages • Group Rates • Honeymoon & Escape Packages • PADI Five-Star Training Facility • Windsurfing • Mini-Sailing • Tennis • PADI Certification Courses • Around The Island Tours • Diamond Waterfall • Table Tennis • Snorkeling • Upper Piton Bar & Dining Room • King Louis XVI Mineral Baths • Shopping By Boat • Old French Colonial Plantation Tour • Deep Reefs • Walls • Drop-Offs • Caves • Tunnels • Shallow Reefs • Short Boat Trips • Camilla's Voodoo • Tropical Forest Walks • Hot Waterfall • 37 Foot Sailboat • Day-Sailing Trips • Blue Water Sailing Lessons • Resort Scuba Courses • Yellowbird • Strobe Recharging Station • Personal Equipment Lockers • Chaise Lounges • Beach Towels • Open Water Training • Patois Lessons • Mountain Climbing • E-6 Film Processing • Camera & Strobe Rental • Love Affair • Deep Sea Fishing • AL-80 Tanks • 3000 PSI • Free Airport Transfers • Magnificent Sunsets • Calypso Steel Band • U/W Photo Instruction • Coco Loco • Fresh Water Showers • Bird watching • Equipment Rental • Creole Cuisine • International Cuisine • Fruits-De-Mer • Beach Bar • Beach Restaurant • Uncrowded Reefs • Shak-Shak Band • Caribbean Kiss • Changing Rooms • Wash Tanks • Camera Rinse Tanks • Red Hot Live Bubbling Drive-In Volcano • Superman Flight • Coral Gardens • Turtle Reef • Porsche 911 • Sea Fan Canyon • Equipment Repairs • Tekna Diver Vehicles • 7 PADI Instructors • 4 Dive Boats • Personalized Service • 365 Days A Year • Flat Top • Soufriere Experience • Calm Waters • Welcome Cocktail



st. Lucia

IN CANADA CALL 416-960-0710
IN MINNESOTA CALL 612-544-7168
715 Florida Avenue South, Suite 201
Minneapolis, MN 55426

ANSE CHASTANET

instruction—resort courses are very popular with non diving guests once they discover what's offshore.

The topside of St. Lucia is equally exotic and lush, constantly beckoning you away from the beach with spice and flower-scented breezes and promises of marvelous scenes. The hotel can arrange excursions to the rain forest, volcano, beautiful waterfall and surrounding botanical gardens and mineral baths and the busy and very West Indian capital of Castries on market day. Between the topside attractions on the 238 square mile island, Anse Chastanet's mile long reef and 24 sites regularly visited by boat there is too much to see in a week.

Anse Chastanet is a destination in itself. Excellent West Indian, creole and continental fare varied each day; the idyllic seclusion and watersports activities of the beach area (Sunfish and windsurfers are free for guests); and a tennis court provide enough to keep guests content during the week.

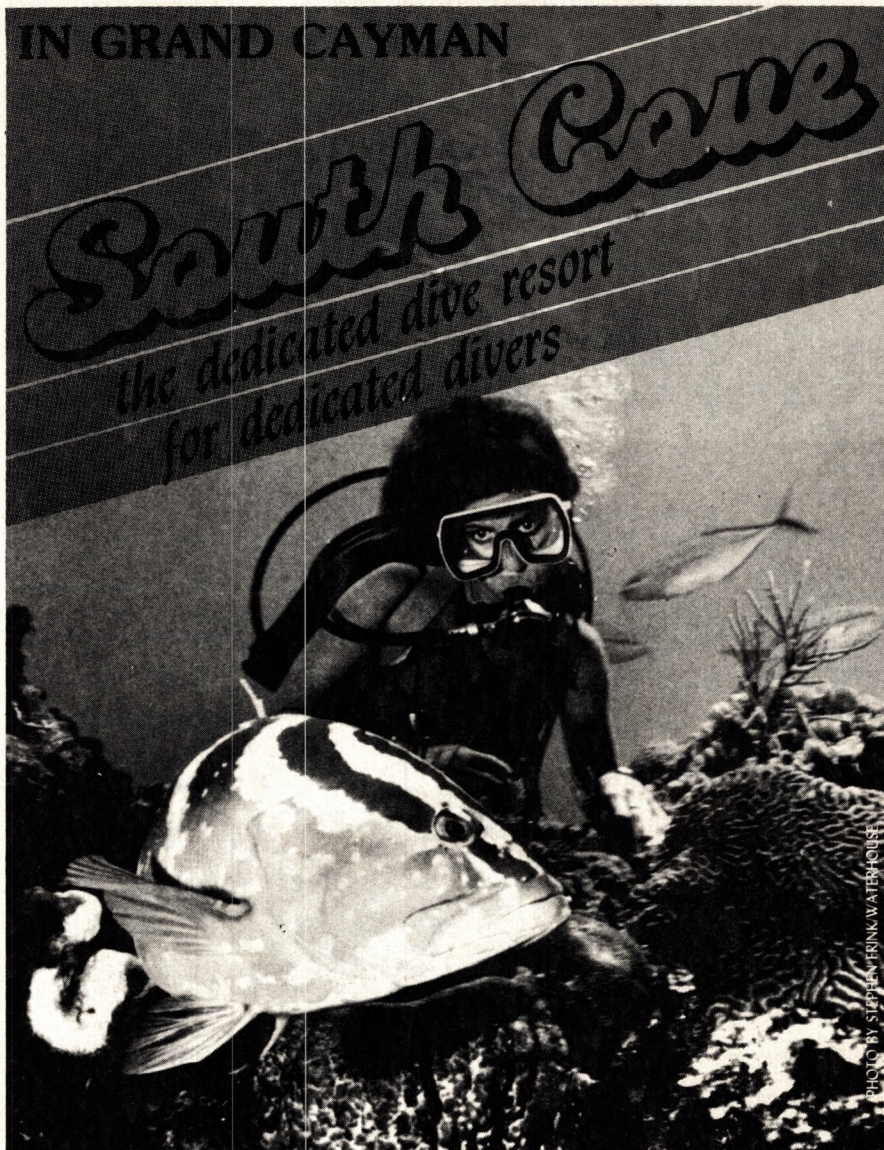
But, it's not for everyone, and too quiet for even some well-traveled guests. Anse Chastanet is a refuge for romantics of better than average means—and sensibilities—who appreciate its very special, gentle West Indian ambience. It is one of few places in the Caribbean to which you can still escape.

For information contact: Anse Chastanet, 715 Florida Avenue South, Minneapolis, MN 55426; phone toll free (800) 328-5285; in Minnesota, call (612) 544-7168; in Canada, (416) 960-0710. Or, contact Sea Safaris, 3770 Highland Ave., Suite 102, Manhattan Beach, CA 90266; phone toll free: (800) 262-6670 in CA; (800) 821-6670 out of state. Or contact Anse Chastanet directly in Soufriere, St. Lucia, P.O. Box 216; (809) 454-7355.

CAYMAN BRAC MARINE BIOLOGY COURSE

The University of the Pacific, in conjunction with Oceans Unlimited, is conducting a tropical marine biology course on Cayman Brac, BWI, from January 5-13, 1986. Lodging will be at the Tiara Beach Hotel. Students will study the natural history of the island and surrounding reefs. They will be introduced to the reef communities on daily boat and beach dives. Scuba instruction will be available for non-divers. Extension credit may be obtained by individuals not currently attending the University.

For more information, contact Dr. Steven Anderson, University of the Pacific, Department of Biological Sciences, Stockton, CA 95211, (209) 946-2182; or contact Ken Wright at (714) 661-0320.



FOR MORE INFORMATION ON OUR
DIVE PACKAGES CALL: 1/800/231-4610
IN FLORIDA OR OUTSIDE CONTINENTAL U.S.
CALL 305/381-9954



circle #179 on Reader Service Card

TRUK LAGOON

8 days

\$1799 includes:

Air, hotels, diving,
transfers & tax.

CALL TOLL FREE

1-800-348-0842

TRUK & PALAU

13 days

\$2649 includes:

Air, hotels, diving,
transfers & tax

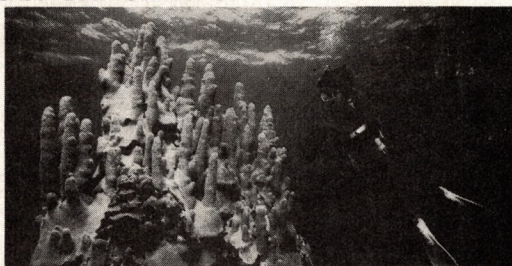
CALL TOLL FREE

1-800-348-0842

circle #180 on Reader Service Card

Anthony's Key Resort

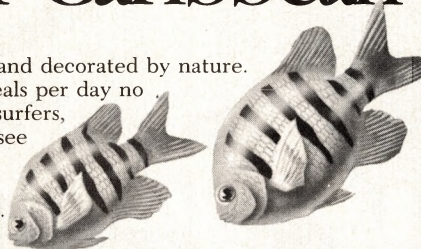
ROATAN • BAY ISLANDS



Discover Our Caribbean

The way it used to be... Pristine, Unspoiled and decorated by nature.

AKR offers the most complete package; 3 meals per day no service charge, tennis, canoes, sailboats windsurfers, slight additional charge for deep sea fishing, see why travel professionals have called us the most beautiful dive resort in the world. Call or send today for information or reservations.



Anthony's Key Resort

1385 Coral Way
Coral Gables, FL 33145

(305) 858-DIVE 1-800-227-DIVE

Name _____

Address _____

City _____

State _____

Zip _____



circle #181 on Reader Service Card

Located in East End



Grand Cayman Island

Frank Conolly, G.M.—Dale Bellman, Padi Inst. COME TO TORTUGA & ENJOY!

Dive sites: Snapper Hole, Underwater Castle, Garden of Eels, The Maze and many more! Wreck dives and night dives available.

All guests receive full use of tennis courts, sunfish sailboats & snorkeling gear. Welcome drink, A/C, ceiling fans, all rooms beach front. Daily 2 (1 tank dives) 3 nites reservations transfers included.

DIVER 80 p/p Daily MAP

NON-DIVER 60 p/p Daily MAP

Private or group instruction available

P.O. Box 496, Grand Cayman, BWI; 809-947-7551

circle #182 on Reader Service Card

Sail and Dive the Virgins on your chartered yacht.

UNLIMITED DIVING!
DELUXE STATEROOMS
GOURMET MEALS OPEN BAR
WINDSURF - WATERSKI
ALL GEAR PLUS COMPRESSOR

8 DAYS / PER PERSON
\$700 - \$900
PLUS AIRFARE

CALL FREE TO
VIRGIN ISLANDS

800 524-2005

VIRGIN ISLANDS Scuba/Sail CHARTERS

Box 10966 • St. Thomas • U.S.V.I. 00801 (809) 776-2860

CHURCH COURSES/ SUNSET HOUSE

Jim and Cathy Church, SDM contributing photo editors, have chosen Sunset House, Grand Cayman, as the site for their 1986 summer U/W photography courses. "Sunset House has everything we need, especially location," Jim stated. "We can take our students to the regular Cayman dive sites or to new sites just south of Sunset House." The Churches, who had taken a sabbatical during the summer of 1985, are anxious to get started again with their updated teaching methods.

Each of the ten, seven-day courses will have an arrival day with afternoon lectures and a group dinner with the Churches; six full days of instruction and photo diving ending with a special graduation dinner; and a departure day with a morning session for last minute questions. Film processing and use of many items of U/W photographic equipment will be included.

Course dates are: May 31 to June 7, June 13 to 20, June 22 to 29, July 10 to 17, July 19 to 26, July 31 to August 7, August 9 to 16, August 22 to 29, August 31 to September 7, and September 13 to 20. For more information, contact: Jim and Cathy Church, P.O. Box 80, Gilroy, CA 95021-0080, (408) 842-9682.

THE DIVE SHOP

Florida's newest dive store, The Dive Shop, opened in June of this year in Fort Pierce. The opening brings more than just another dive shop to the area, it provides the only dockside air on Florida's east coast.

Manager Earl Yearicks brings 20 years of diving experience to the store. MDEA instructor George Abrahamsen has an additional ten years of experience.

Fort Pierce, along with the rest of Florida's Treasure Coast, has reefs in 12 to 110 feet of water. For more information on local dives and charters contact: The Dive Shop, 1002 Seaway Drive, Fort Pierce, FL 33449, (305) 466-5555.



Enough beach diving, let's get a boat!



CARL ROESSLER REPORTS

FOR SEE & SEA TRAVEL

President, See & Sea Travel Service, Inc.
 Author, *The Underwater Wilderness*
Mastering Underwater Photography
The Undersea Predators
Diver's Guide to the Cayman Islands

THE RED SEA ABOARD COLONNA II and COLONNA III

Dateline Sharm el Shiekh: tarred with the brush of sensational media coverage, this quiet paradise is one of the most misunderstood places on earth. When you fly into Sharm-el-Shiekh for your dream dive trip you step into a deserted, quiet, spectacular paradise of underwater beauty and thrills. You'll leave the headlines far behind when you realize that this remote desert promontory appeals only to you and your fellow divers. Governments and alarms recede, and you are ready to enjoy some of the world's most lush and prolific reefs.

The most flexible vehicles for your diving adventure in the Red Sea are the *Colonna II* and *Colonna III*. Based right in Sharm-el-Shiekh, these comfortable live-aboard dive boats eliminate the need for long cruises back and forth to Israel. You can be diving The Temple, one of the Red Sea's greatest dive sites within a half-hour of boarding See & Sea's floating dive resorts. Why waste your precious diving time on long, uncomfortable cruises? Step off the plane right in the middle of the best diving areas and go to it!

Then, for the rest of your stay

you'll enjoy unlimited access to great diving. You will night dive with thousands of flashlight fish at Ras Muhammad; explore the wrecks of the *Dunraven* and *Jolanda*; be astonished at the life at Jackson and Gordon reefs in the Straits of Tiran between Egypt and Saudi Arabia.

Beyond the superb diving, you'll enjoy comfort, privacy and good food. With three private double cabins, *Colonna II* is perfect for individuals, couples and families. For groups of 10 - 16, *Colonna III* works in tandem with *Colonna II* to offer your group the greatest undersea adventure you've ever enjoyed.

See & Sea selected these boats because they are lovingly maintained, with friendly and efficient crews. Both are small enough to anchor directly on the dive site so you don't have awkward transfers to inflatables or skiffs. In every way, these boats fit perfectly the topography and mood of the Red Sea's richest reefs. See & Sea wants you to have the finest diving vacation the Red Sea can offer.

In addition, your arrangements in Cairo, or exotic cruises up the Nile to the Valley of the Kings, Luxor and Karnak Temples, plus all airline arrangements are available through the competent service of the world leader in dive travel, See & Sea of San Francisco.

It is important that your Red Sea adventure be right for you. Don't accept poor substitutes - insist on the Red Sea's best. Call See & Sea today to see when you can join a departure or arrange your own group charter.



See & Sea Travel, Inc. exclusively represents the world's finest fleet of dive cruisers as well as booking the world's leading shore-based dive resorts. See & Sea will not represent any vessel that won't deliver excellent food, personal comfort and service and unlimited diving. Join us in Belize, the Bahamas, the Caymans, Turks & Caicos, Guadeloupe, Red Sea, Truk Lagoon, Palau, Hawaii, Fiji, Philippines, Papua New Guinea, Galapagos, Australia's Coral Sea and our Great White Shark expedition. Insist on the finest; insist on See & Sea diving adventures.

See & Sea
 TRAVEL SERVICE, INC.

680 BEACH ST./SUITE 340
 SAN FRANCISCO, CA 94109
 TELEPHONE (415) 771-0077
 TELEX 278036 SEAS UR

Call the Dive Experts at: 1-800-DIV-XPRT



DIVE PLUS?

DIVE PLUS offers you the most complete and varied diving vacation package in the Caribbean.

- A DAY OF DIVING (OR MORE) ABOARD YOUR OWN PRIVATE 44' SAILING YACHT (at your option).
- IMAGINATIVE PROGRAMS FOR NON-DIVERS.
- FINEST HOTEL ACCOMMODATIONS AND GOURMET FOOD IN THE ISLANDS.
- FREE WINDSURFERS, DINGHY AND OUTBOARDS.
- THE ONLY SWIMMING POOL IN THE ISLANDS.
- INDIVIDUAL SERVICE—NO CATTLE BOATS HERE.

At DIVE PLUS, a lot goes on when the tanks come off. So after you dive hard you can play hard. And you can do it all at hard-to-beat prices.

For more information, write or call toll free **800-237-1131**. In Canada or Florida (813) 886-6783. Dive Plus Resorts, Division of CSY (BVI), Ltd., 5936 Benjamin Road, Tampa, FL 33614

DIVE PLUS
RESORTS
ROATAN/ BAY ISLANDS

circle #183 on Reader Service Card



A



B



C



D

Actual Size

A. JUMPING DIVER \$235 B. FIN \$145
C. SMALL DIVER \$100 D. TANK \$165

ALL PIECES SOLID 14 K GOLD

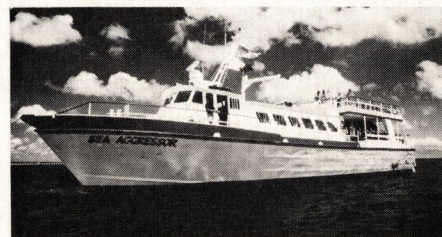
Order by Dec. 6 For Christmas
Allow 2 Weeks for Delivery
For Express Delivery, Add \$12
Fla. Residents, Add 5% Tax
Send Check or Money Order To:

Precious Ocean, © Ltd.
Nautical Works of Art
In Fine Gold
5130 N. Federal Hwy., Suite 1
Ft. Lauderdale, FL 33308

circle #227 on Reader Service Card
96 SKIN DIVER DECEMBER 1985

SEA AGGRESSOR/WILD KINGDOM

A film crew recently completed a 12 day dolphin adventure aboard the 90 foot *Sea Aggressor*. Photographers Hardy



Jones and Howard Hall report they had exciting dolphin filming every day.

For further information about *Sea Aggressor* contact See & Sea Travel, Inc. 680 Beach St., Suite 340, San Francisco, CA 94109; (415) 771-0077.

DON FOSTER'S CAYMAN DREAM

Don Foster's Dive Grand Cayman Ltd. is offering eight day/seven night Cayman Dream vacation packages at the Royal Palms Hotel on Seven Mile Beach. This winter dive package includes six days of diving: two tank morning dive; one tank afternoon dive (night dive upgrade available); unlimited air fills for shore diving; and Don Foster's T-shirt. Tax and gratuity are not included.

Those preferring the privacy and convenience of their own beachfront two-bedroom/two bath apartment or villa can enjoy similar near-summer rates at any of Hospitality World Ltd.'s deluxe villas on Grand Cayman. The same dive package privileges apply, and all daily transfers to and from dive boats are provided in package cost.

For information contact: Scuba Tours Inc., (800) 526-1394; in NJ (201) 256-9115.

TRESPASSER

Duncan and Annie Muirhead have added the 48 foot trimaran, *Trespasser*, to their fleet of live-aboard sail/dive boats. *Trespasser* will join the 18 passenger, 96 foot *Lammer Law* and the eight passenger, 56 foot *Misty Law*.

Trespasser will expand the Muirhead's service by providing space and comfort for six people at a somewhat lower price to suit the more budget conscious. The standard of service and food will be maintained on the smaller yacht and the bar will be free. *Trespasser* will be bookable by individuals and private parties.

The captain of the *Trespasser* is Brad Nielsen, who was the divemaster on *Lammer Law*. Cook Sarah Pye, who was trained on *Lammer Law*, has also moved to *Trespasser*.

RON KIPP'S
CAYMAN
DIVING LODGE

The Exotic East End of Grand Cayman

- Personal Diving Resort
- Spectacular north, south and east wall diving
- Virgin reefs, caves and shipwrecks
- Underwater photo and video courses

All inclusive
dive packages
from only

\$244

NEW FOR 1985

- Islandwide unlimited shore diving
- All facilities of Bob Soto's Diving, Ltd. available including the new SCUBA CENTRE
- Enjoy the Fourth Wall plus the wreck of the *Oro Verde*

1-800-BOB-SOTO
1-800-262-7686

MEMBER
CAYMAN ISLANDS
WATER SPORTS
ASSOCIATION



BOX 11
East End
Grand Cayman,
British West Indies

circle #184 on Reader Service Card

OCEAN DIVERS 305 451-1113
P.O. Box 1113 KEY LARGO, FL 33037

CALL TOLL FREE 800-451-1113
OPEN 7 DAYS A WEEK

PENNEKAMP'S ONLY WATERFRONT FULL SERVICE DIVE RESORT



KEY LARGO FLORIDA

**PORT
LARGO
RESORT**

JOIN TO BRING YOU THE FINEST IN DIVING
AND ACCOMMODATIONS IN THE FLORIDA KEYS' PREMIER DESTINATION
JOHN PENNEKAMP CORAL REEF STATE PARK



**KEYS ONLY PADI 5 STAR
FACILITY & DVI RESORT**

- COMPLETE PRO DIVE SHOP
- SCUBA INSTRUCTION & SPECIALTY COURSES
- STEPHEN FRINK PHOTOGRAPHIC COMPLETE PHOTO SERVICE
- MARINE SUPPLIES
- LAUNCH RAMP & DOCKAGE
- BAIT, TACKLE & FUEL
- DOC'S GALLEY RESTAURANT
- SWIM W/DOLPHINS PROGRAM
- MARINE RESOURCES U/W HABITAT PROGRAM/AQUANAUT CERT.



STEPHEN FRINK - PHOTO

**PORT LARGO
RESORT** FEATURING DELUXE
ACCOMMODATIONS IN LUXURIOUS VILLAS

- 1 AND 2 BEDROOM, 2 BATH VILLAS WITH COLOR TV, STEREO, KITCHENS, BALCONY
- POOL—POOL PARTY EVER SUNDAY!
- TENNIS COURTS, EXERCISE ROOM
- CUSTOM DIVE PACKAGES ARRANGED FOR GROUPS OR INDIVIDUALS
- WATERFRONT LOUNGE FEATURING LIVE ENTERTAINMENT NIGHTLY
- BOAT RENTALS, SAILING, AND FISHING CHARTERS AVAILABLE



**WATERFRONT COCKTAIL
LOUNGE • LIVE ENTERTAINMENT NITELY!**

PORT LARGO RESORT—305-451-4107
P.O. BOX 1050, KEY LARGO, FLA. 33037

U.S. TOLL FREE 800-451-DIVE
FLA. TOLL FREE 800-253-DIVE

Put Yourself In Our Shoes Cayman Brac from **\$349**

B.W.I.

Including Airfare From Miami



Value For 4 days/3 nights your dive package includes: Round trip air fare from Miami or Houston*, oceanview room, airport transfers, 2 - 1 tank A.M. boat dives each full dive day, one night dive and unlimited offshore diving.

Comfort All rooms are air conditioned with an ocean view. Fresh water system throughout the hotel. Dine at the Brac's favorite restaurant and enjoy meals and scrumptious buffets prepared by our five star chef.

Convenience Dive shop and photo center on premises. Dive boats depart from hotel. Jet services from either Houston or Miami on Cayman Airways.

Personalized Diving Winston Mcdermott has been diving the waters of Cayman Brac for the last 23 years. He has been diving the Brac Reef Divers for the last eight years.

We have the right ingredients for an enjoyable dive vacation.

Come to Cayman Brac and let us

put you in our shoes.

Prices subject to change without notice

National Wats: 1-800-327-3835

Florida Wats: 1-800-233-8880

Hollywood: 305/987-8880 • Miami: 305/620-6917
5920 Rodman Street • Hollywood, FL 33023

BRAC REEF
BEACH RESORT

Package Valid: 12/21/85 - 4/4/86
Packages from Houston slightly higher

circle #185 on Reader Service Card

CURACAO SEAQUARIUM

Visitors at Curacao don't need a wet-suit, facemask or even a glassbottom boat to enjoy the spectacular underwater life surrounding the island. Now they can visit Curacao's newest tourist attraction, a 40,000 square foot Seaquarium filled



with a dazzling array of exotic tropical fish, anemones, sponges, starfish, coral and even sharks.

About five minutes from the capital city of Willemstad, the Seaquarium is the brainchild of an energetic underwater enthusiast named Adrian "Dutch" Schrier who conceived and built the project, backed by a group of local businessmen.

So far \$1.4 million has been spent on the installation with a new marina, underwater restaurant and beach currently under construction. And, in the future, there will be a hotel with fully equipped scuba diving facilities. The Seaquarium overlooks Curacao's Underwater Park.

Further information on the Seaquarium and other tourist attractions in Curacao is available by contacting: Curacao, P.O. Box 1446, Radio City Station, New York, NY 10101-1446.

UNEXSO ARCTIC SAFARI

The Underwater Explorers Society (UNEXSO) announces the first in a series of different and unusual diving vacations. May 3 to 16 John Englander, president of UNEXSO, will lead a group, limited to nine participants, to an area in the High Arctic in the region of the magnetic north pole. Participants will dive under ice up to 10 feet thick and have an opportunity to view unusual life such as polar bear and walrus. The expedition will travel hundreds of miles by snowmobile and actually spend several nights camping out on the ice.

The cost of the trip includes air fare from Toronto, provisions, lodgings and complete Arctic clothing.

For information contact: John Englander, UNEXSO, P.O. Box F-2433, Freeport, Grand Bahama; (809) 373-1244.

THE WORLD IS SPLIT IN TWO!

THOSE WHO
ARE DIVING
WITH US...

AND THOSE
WHO WOULD
LIKE TO!

The 95' 'Lammer Law' is the world's most luxurious dive boat operated by the most experienced company in the British Virgin Islands

TOLL FREE!
800-648-3393
800-448-8866
Trimarine Boat Co.
Homeport,
St. Thomas VI
00802



La Mer sees spots



Do you see spots when
you try to compare one dive
travel package with another? If so, here are few important facts.
La Mer offers only first-class dive vacations in thirteen exotic spots around the world.
All on superb live-aboard boats. All escorted by La Mer dive professionals
to insure you get the very best.
And all at a price that will *not* blur your vision.
So write us or call our toll-free number.
And we'll answer your questions on the spot.

Red Sea • Galapagos • Western Australia • Great White Shark
Coral Sea • Sea of Cortez • Truk Lagoon • Palau • New Guinea
Philippines • Little Cayman • Maldives • Fiji

LA MER

La Mer Diving Seafari, Inc.

823 U.N. Plaza, Suite 810, New York City, NY 10017 Telex: 238973AII

In New York State call 212-599-0886

or in the continental U.S. call 1-800-348-3669.

That's 1-800-DIVE NOW

Try to find a better place to dive than The Bahamas. But don't hold your breath.

We're confident for good reason. We know you'd have to travel the globe to get the diving variety you'll find in The Bahamas. No wonder we're the world's #1 dive destination.

The Abacos have wrecks, caves, blue holes and underwater parks.

Andros offers the second largest barrier reef in the world. Where blue hole and wall diving began.

Chub Cay in the Berry Islands features great reef and wall diving on the Tongue of the Ocean.

Bimini is right on the three-knot Gulf Stream. A haven for drift and wall divers.

Eleuthera is known for its wrecks on the aptly named Devil's Backbone, including a Civil War train wreck.

The Exumas are the heart of the southern Bahamas. Lively Georgetown. "Thunderball Grotto" off Staniel Cay.

Grand Bahama is a total sports resort. Secluded beaches. Famous diving facilities with instruction for novices and experts.

New Providence is one of the best-kept diving secrets in The Bahamas. Setting for many of the James Bond films.

Rum Cay, remote and exclu-

sive, known for wall diving and tame groupers, and the H.M.S. Conqueror wreck.

Long Island will keep you busy with shallow reefs, dramatic walls, and famous Shark Reef.

After diving, if you want to dry off a little, there are ways. A few sets of tennis. Golf on championship courses. International shopping. Gambling. Dancing. Colorful nightlife. The Bahamas has it all. For reservations, call your travel agent, or call us at 800-327-0787. In Dade County, 443-3821. For sports information, call 800-32-SPORT.



They don't get any better than this.

The Great Escape...

RUM CAY CLUB

Not only impressive scuba diving... but fine sport fishing, lovely secluded beaches, excellent food and accommodations, sailing, and of course—relaxation and being pampered... all to make your get-away one to remember.



For reservations CALL COLLECT: (305) 467-8355 or write: RUM CAY CLUB: P.O. Box 22396/Ft. Lauderdale, Fla. 33335

circle # 187 on Reader Service Card

DIVE ABACO

Marsh Harbour, Bahamas

GREAT ABACO BEACH HOTEL at ocean's edge, setting in a tropical coconut plantation atmosphere—is surely everyone's dream.

Air-conditioned rooms, fresh-water pool, gourmet meals, tennis and private beach.

DIVE WITH CAPT. SKEET LaCHANCE—an experience in itself. Spectacular undersea park, caves, coral gardens, fish feeding, diving with a personal touch and lots of it! A full-service dive center.

- **4 DAYS/3 NIGHTS Diver \$218.00**
- **8 DAYS/7 NIGHTS Diver \$519.00**
- **CALL TOLL FREE 1-800-327-7333**

Florida or outside U.S. 1-305-524-0106
280 S.W. 34th Street, Ft. Lauderdale, FL 33315



circle # 190 on Reader Service Card

Where's the reef?

The reef, scuba divers and underwater photographers seek out, is Shark Reef, Stella Maris Inn's most famous dive. Also offered, are a wide range of non-shark dives, along the leeward and Atlantic coast; in fact, perfectly easy photo dives are made at hundreds of shallow/medium deep coral heads and reefs, mild drop-offs and breathtaking walls!

8 Day/7 Night Diver Package from \$434, includes overnight adventure dive cruise to world-famous Conception Island and/or Rum Cay.

For reservations, call toll free U.S. & Canada 800-327-0787, Miami 443-3821, or see your travel agent.



circle # 188 on Reader Service Card

CORAL HARBOUR DIVERS

NASSAU, BAHAMAS

Come dive S.W. New Providence with Stuart Cove
Explore the exciting James Bond sites, Tongue of the Ocean walls, and our magnificent reefs

- Our shop is located in picturesque Lyford Cay
- Dive sites only 10 minutes from our dock
- Personalized service with our small groups
- PADI training facility
- Introductory resort courses and 5-day certification classes



CORAL HARBOUR DIVERS
PO. Box SS5635
Nassau, Bahamas

(809) 326-4171

circle # 191 on Reader Service Card

South Ocean Beach RESORT

NEW PROVIDENCE ISLAND, BAHAMAS

- Our 5,000-acre country club resort represents the best all-around vacation for divers and non-divers
- Dive the wall on the tongue of the ocean
- Spectacular drop-offs; coral gardens galore!
- Dive sites from the famous James Bond movies
- Sailing, wind-surfing, tennis, and golf
- International shopping, casinos, gourmet dining and exciting nightlife just minutes away.
- Special bulk fares on Eastern Airlines available.
- Commissionable packages and group rates to dive shop operators.

Call toll free (800) 558-2828

circle # 189 on Reader Service Card

Sea & Ski Ocean Sports

Water sport operators at The Grand Hotel on Paradise Island. • Jet Ski Rental • Waterbikes • Reef Trips •

Hobie Cats • Waterskiing • Windsurfing • Underwater Camera/Equipment Rentals •

Scuba trips depart from our famous Paradise Island beach twice daily Call toll free 800-327-4551.



circle # 192 on Reader Service Card

It's Better In The Bahamas

Dream On... !

And live in luxury in a
**Hospitality World Villa as the
Cayman Dream Vacation
Package continues!**



Dive Grand Cayman this winter while enjoying a millionaire's lifestyle on Seven Mile Beach for as little as

\$499 per person (quad. occupancy in a 2-bedroom unit) 8 days/7 nights.
(Gov't tax and gratuities not included)
Effective December 16 - April 6

SCUBA TOURS INC.

1-800-526-1394

In New Jersey: (201) 256-9115.



**DON FOSTER'S
Dive • Grand Cayman Ltd.**

*Serving Dive Shops,
Clubs, Travel Agents
and Individuals*



circle #193 on Reader Service Card



For a Fabulous Time...
Unbelievable Dive Sites:
reefs, wrecks and the friendliest
fish in the Caribbean.....
Dive from our comfortable
Custom 35' MV "Sea Cat"
Hotel Dive & Sail Dive
Packages
P.O. Box 1040, Virgin Gorda Yacht Harbour
Virgin Gorda, British Virgin Islands
Phone: (809-49) 55515

circle #194 on Reader Service Card



DIVE ABACO!!

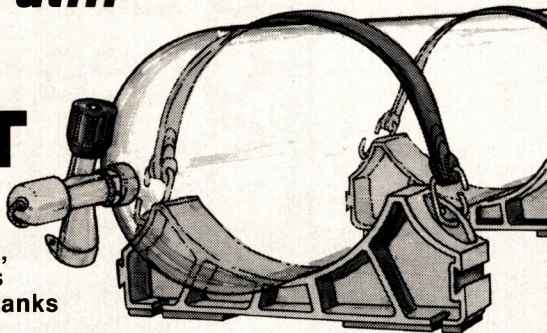
With legendary Skeet La-
Chance. 150 miles of unspoiled
Barrier Reef. Contact P.O. Box
555, Marsh Harbor, Abaco, Ba-
hamas **1-800-327-7605**

circle #195 on Reader Service Card

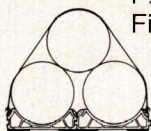
Tanks Stay Put...

TANK ESCORT

**Stops your tank from
rolling in your car, truck,
van or boat. Order yours
today and protect your tanks
and other equipment.**



- Sold in pairs, complete with heavy rubber straps and non-slide pads.
- Made of indestructible polypropylene.
- Adjustable to fit both size tanks.
- Dovetail interlock for multi-tank tie down (2 or more pairs required).
- Dealer inquiries invited.



\$19.95 Per Pair

Plus \$3.00 Shipping/Handling

To order send check or money order,
with name and address to:

QUARRY PRODUCTS

P.O. Box 377
Fitzwilliam, NH 03447

Please allow 2-3 weeks delivery

TANK ESCORT

circle #196 on Reader Service Card

SCUBA VIDEO REFRESHER

Bob Cowart, president of Cowart Marine Enterprises, and his crew of instructors, have produced a complete scuba refresher course on video tape. Designed for the diver who has not been diving for a year or more, the tape is a review of ba-



sic techniques and safety practices, based on the crew's experience and on review of current literature. Among others, topics include: care and use of equipment, entries, mask clearing, buoyancy control, buddy breathing, descents, ascents, exits and potential hazards.

The tape is available in VHS, Beta or 3/4 inch formats from Cowart Marine Enterprises, P.O. Box 23399, Fort Lauderdale, Florida 33307. For information call (305) 563-9808.

PGM/DACOR

PGM, Inc., the Chicago-based marketing and advertising company, has won the top 1985 Marketing Excellence Award, presented by Marketing Communications Executives International.



PGM's campaign for Dacor scuba diving equipment won the international category. William Goldman, PGM partner, said his company's Dive Dacor campaign helped boost export sales—a growing segment of the growth in scuba equipment—for the Northfield, Illinois diving equipment manufacturer.

Discover the treasures of Treasure Cay

Photo: Sue Kleva

NAUI/PADI dive facility
... Nikonos V rentals ...
two custom dive boats ...
3½ mile beach ... newly
expanded dive shop
... new dive equipment
... ROYAL air service
via Gulfstream Pacific
Airways ... free golf ...
free tennis ... free sunfish
sailboats ... five fresh
water pools ... Cable TV
... two restaurants ...
a complimentary cocktail
party from the Manager!



Come join us ...
as we search for lost Spanish galleons
... the ultimate dive vacation ...
enjoy the wreck of the San Jacinto,
a Union gun boat sunk in 1865 ...
hand feed two performing moray eels
... posh Treasure Cay Hotel and Villas
... let us pamper you with our services
... a dive vacation for the elite and
discriminating diver **SEARCHING FOR
LUXURY AT A VALUED PRICE.**



AN AFFILIATE OF GULFSTREAM PACIFIC AIRWAYS



Call or write today for our full selection of dive packages including round trip air
from Fort Lauderdale. **1-800-228-9107/In Florida call 305-763-5665.**

Please send me more information! Mail this coupon to:
Treasure Cay Divers, 4050 Southwest 11th Terrace,
Fort Lauderdale, Florida, 33315.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Attn: Dive Shops/Clubs/Travel Agents —Check with us for
our commission schedule, group incentives & free travel offer.

AFA Inc. Production

circle #197 on Reader Service Card

MAUI 1985

1985 is the year to dive Maui—
Central Pacific Divers offers daily interisland diving trips to
the best spots in Hawaii.

Dive Lanai to more than 20 great sites where you will see lava
tubes, arches, caverns and world famous Cathedrals.

Dive Molokini, a marine preserve on the inside of a partially
submerged volcanic crater. Enjoy walls, reefs, sleeping white
tip sharks, clouds of lemon butterfly fish and tame moray eels.

Dive Molokai, Kahoolawe and the backside of Maui, providing
a variety of diving that is hard to beat. All accessible from
Lahaina Harbor and an easy boat ride.

Central Pacific Divers has year-round diving and unsurpassed
service aboard Odysseus and Zephyrus, two 43' Coast Guard
certified luxury dive boats.

Maui is a unique vacation paradise that not only has fantastic
diving, but also hundreds of nondiving activities for your
time-off.



**CENTRAL
PACIFIC
DIVERS**

A World-Class Dive Operation • 780 Front Street • Lahaina, Maui, Hawaii 96761 • 808/661-8718

Please write or call for information on:

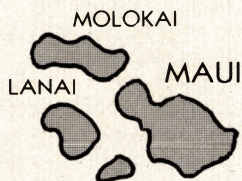
☐ Interisland dive trips ☐ SCUBA certification class ☐ Hotel/condo, car, dive packages

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____



circle #198 on Reader Service Card

"The Ultimate Dive Vacation"

aboard your own PRIVATE YACHT in the Virgin Islands



The Privacy

your own exclusive yacht with gracious accommodations for small groups and families

The Luxury

gourmet food, fine wine and limitless refreshments—all inclusive

The Convenience

full dive gear and a local crew

with knowledge of the most spectacular dive sites in the Caribbean

Three luxury live-aboard dive options. Enjoy some of the most spectacular dive sites in the world! Most are at depths of 35 to 90 feet.

TRULY, an all-inclusive price (3 meals per day, beverages, wine and liquor, dives, accommodations, and more ...) at \$900 to \$1300 per person per week.

DIVE/SAIL Diving can be spontaneous—you choose when and where. Anchor in a private cove on calm seas at night.

DIVE/POWER Charter a luxurious power yacht and move around more quickly to dive sites. Fully-equipped, these yachts have good stern platforms for easy access to the water.

RENDEZVOUS/SAIL Enjoy the privacy of your own yacht, while being picked up and returned by a high-speed, fully equipped dive boat for daily excursions. Resort courses are offered.

The Caribbean Division

VIRGIN ISLANDS WATER SAFARIS

Yacht Haven Marina, Long Bay Road

St. Thomas, USVI 00802

809/774-5950 Telex: ITT3470159

Regency

INTERNATIONAL YACHT CHARTERS

Call toll-free to St. Thomas today!

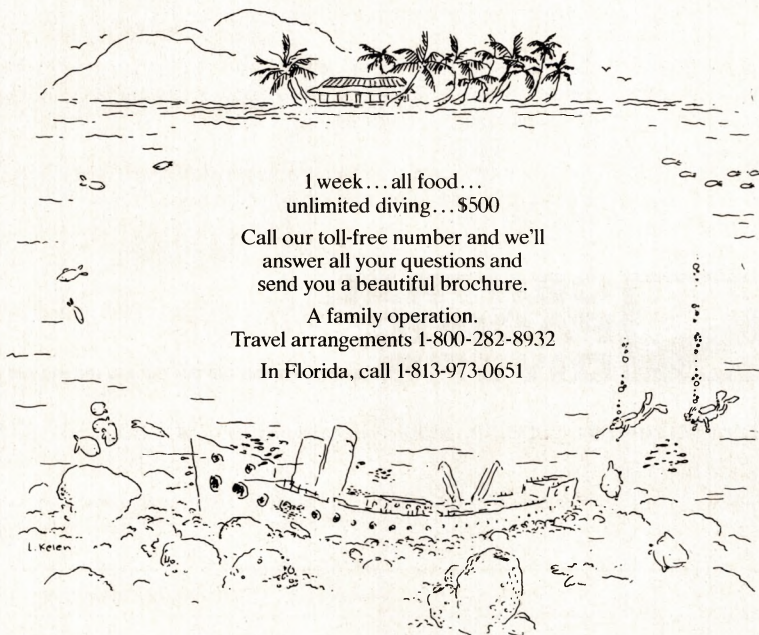
1 800 524-7676

We will set up "The Best Dive Vacation of Your Life!"

Corporate Offices: Eleven Greenway Plaza, Suite 2620, Houston, TX 77046 713/961-1376 Telex: 794-520

circle #199 on Reader Service Card

Our front yard is a wreck, and a beach, a sun deck, a 110 foot wall...



1 week... all food...
unlimited diving... \$500

Call our toll-free number and we'll
answer all your questions and
send you a beautiful brochure.

A family operation.

Travel arrangements 1-800-282-8932

In Florida, call 1-813-973-0651

COCOVIEW RESORT
Roatan, Bay Islands, Honduras

circle #200 on Reader Service Card

THE R.P. RESOR

Sub Victim Offers
Something Exciting
Around Every Corner

TEXT AND PHOTOGRAPHY
BY STEVE GATTO

I suddenly awake from a dead sleep to the roar of the twin diesels of the *Down Under*, a dive boat from Barnegat, New Jersey. As we glide out of our mooring the anticipation of a dive just three hours away tantalizes me. I leave the warmth of my sleeping bag briefly to take a peek out the window and see Old Barney light-house in the dim light of dawn. It's so quiet only a few gulls and some diehard fishermen are on the rockpiles. Most of the commercial boats are already out for a hard day's work. After checking the conditions of the tricky Barnegat Inlet, I return for a rocky but fulfilling three hours' sleep as the diesels clamor on. Our destination: the Esso tanker SS *R.P. Resor*.

The *Resor* was a modern looking (for her day) armed tanker. Widely publicized in 1935 when built, she set a new standard in the shipping industry with an overall length of 445 feet, six inches. With two D type Foster Wheeler boilers and an Allis Chalmers cross compound turbine engine she could do 12.7 knots.

On a cold night, February 26, 1942, the *Resor* was struck twice in the midsection by torpedoes from a German U-boat. With a cargo of 78,729 barrels of fuel oil bound via Baytown for Fall River, Massachusetts, she had no chance of survival. Burning furiously out of control, she offered little chance for her crew to escape. Of her 50 officers and crew only two survived. The *Resor* drifted, on fire, until she was recovered by the Navy tug *Sagamore*. On February 28 she sank to her final resting place, 32 miles east of Barnegat Inlet, in 125 feet of water.

It's a half hour before we reach our destination. I get up, wake my dive buddy, Tom Packer, and begin to pull on the layers of long underwear I wear under my drysuit. Within minutes the grapnel is hooked into the wreck of the *Resor*. With a quick check of our equipment my buddy and I are over the side. Swimming to the anchor line, I'm amazed at the 60 foot visibility. We've hit just the right day. Visibility in the North Atlantic can vary from 60 feet to as little as six inches.

As we descend, silhouettes begin to appear below us. As I touch the canted decking at 70 feet one quick look around tells me exactly where I am. To my left is a four inch diameter gun, disarmed forever and pointing at the sand. To my right, twin ventilator stacks reach for the surface. I'm on the starboard stern of the

WaterWorks - Chicago

BAHAMAS

**'In Andros, you'll get
Superdiving, -and
no crowds'**ANDROS BEACH
Hotel & Villas

140 miles of unexplored barrier reef – and not another dive boat in sight. Coral gardens, drop-offs, huge shipwrecks, exotic blue-holes. 15 deluxe air-conditioned rooms, full-service restaurant and bar overlooking a fresh-water pool. Two custom-dive boats. The perfect alternative to the 'follow the mob' syndrome.

Call or write for details!

TOLL FREE
800-327-8150
(305) 763-2188
FLORIDA



**3 DAYS
2 NIGHTS**
as low as
\$395
(p.p. dbl. occ.)

**8 DAYS
7 NIGHTS**
as low as
\$865
(p.p. dbl. occ.)

3 DIVES PER DAY
(2 on arr. & dep. days)
INCLUDES: R/T Airfare
• Ground Transfers • A/C
Room • 3 Meals Daily
• Room Taxes and Tips.

**ANDROS
UNDERSEA
ADVENTURES**
P. O. Box 21766
Ft. Lauderdale
FL 33335

BAHAMAS

**'Dive the
Bimini Wall,
-and other
legends'**

Neal Watson, a
modern dive legend
and owner of
Undersea
Adventures.



Dive Moray Alley, the wreck of the 'Sapona', Victory Reef, The Atlantis Road, and drift along the 'edge of the world', suspended in the crystal-blue water of the Gulfstream. At night, follow Hemingway's footsteps to the local pub.



40' CUSTOM-DIVE BOAT 'SHARKBUSTER'

BIMINI STANDARD
3 days As low as **\$299**
2 nights as
per person, double (includes 7 dives)

BIMINI DELUXE
3 days As low as **\$375**
2 nights as
per person, double (includes 7 dives)

STANDARD 8 Days/7 Nights
\$699 per person, double
(includes 22 dives)

DELUXE 8 Days/7 Nights
\$950 per person, double
(includes 22 dives)

INCLUDES: Round-trip Airfare • Transfers to and from Airport • Air-conditioned accommodations • Deluxe: Gourmet Breakfast and Dinner Daily (MAP) • Free Tennis • Fresh-Water Pool • Standard: 3 Meals Daily • All Gratuities.

For more information or
reservations: Write or Call Today!

TOLL FREE **800-327-8150**



**BIMINI UNDERSEA
ADVENTURES**

P. O. Box 21766
Ft. Lauderdale, FL 33335
Telephone (305) 763-2188

BAHAMAS

**'At Chub Cay – spend your days
in the Tongue of the Ocean
and your nights at the Club'**

Chub Cay is one of the finest 'total' diving and fishing resorts in the world. Exotic coral falls into a deep-water trench forming miles of wall diving – a place where shallow and deep-water species mix for unsurpassed diving thrills. Come stay with us on our own special island. Self-contained, friendly, unique. E-6 Photo Lab on Premises.

Call or write for details.

TOLL FREE
800-327-8150
(305) 763-2188
FLORIDA



**3 DAYS
2 NIGHTS**
as low as
\$399
(p.p. dbl. occ.)

**8 DAYS
7 NIGHTS**
as low as
\$975
(p.p. dbl. occ.)

3 DIVES PER DAY
(2 on arr. & dep. days)
INCLUDES: R/T Airfare
• Ground Transfers • A/C
Room • Breakfast
and Dinner Daily
• Room Taxes and Tips.

**CHUB CAY
UNDERSEA
ADVENTURES**
P. O. Box 21766
Ft. Lauderdale
FL 33335

George and Luana Marler's

AQUATIC CENTRES

VIRGIN ODYSSEY

explore the B.V.I. on your own private yacht, an *endeavour* from Tortola Yacht Charters



UNLIMITED DIVING

8 days/7 nights
Air Conditioned
Accommodations
Unlimited Diving
All taxes and service charges included

\$495.00

per person

CALL TOLL FREE **1-800-345-6296**

ask for Claire Rowe the expert in scuba vacations.

circle #202 on Reader Service Card

MADE IN THE U.S.A.!

Dive the incredible dry Tortugas. 5 day trip from Key West on "More Bottom Time"

\$325 Per Person Includes:

- 5 full days of diving (3 tanks/day)
- All meals, air (on board compressors)
- Rental equipment available
- Non divers half price
- 95' steel hull live aboard vessel (23' wide)
- All modern electronics
- 17' whaler chase boat • Max. 25 divers
- Fresh water showers

Depart Sunday P.M., return Friday P.M.



BOTTOM TIME ENTERPRISES 904-722-4574
ROUTE B, BOX 2450, YOUNGSTOWN, FL 32466

circle #203 on Reader Service Card

'Nobody Has More Fun'



Join us for a sail/dive excursion departing from Miami.

Options include:

- 3 dives a day • beach parties
- island exploration • out-island nightlife • shell collecting • sailing
- fishing • lobster hunts • lazy days • virgin diving

Always a good time, often a great adventure.

Write or call:
Blackbeard's
CRUISES

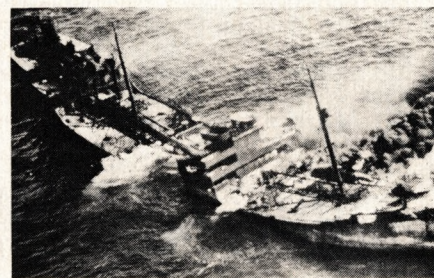
P.O. Box 66-1091, Miami Springs, FL 33266
Toll Free (800) 327-9600 • Florida (305) 888-1226

circle #204 on Reader Service Card

R. P. RESOR

wreck. After I get my equipment situated, I slide off the side to the sand at 125 feet and marvel at the awesome size of the vessel. Except for a small piece of the bow, the stern is the only part of the wreck mostly intact. The midships are blown about the ocean floor. Schools of pollack and bergal patrol the perimeter of the wreck while the cod hide inside, some as big as 45 pounds. Lobsters are abundant on the *Resor*.

For the artifact hunter and photographer there is an array of wreckage to filter through. The *Resor* gives you the feeling that around every corner there's a good chance of finding something that may unlock part of her mystery. There are all kinds of cracks and crevices where your beam of light may just yield a good find.



The tanker *R. P. Resor* was torpedoed by a German U-boat in 1942. Marine growth now covers the tortured steel of her hull.



There are, of course, portholes to be found. The most readily available ones are now gone, but with a good eye you can spot others

Swimming down a corridor I pass doorways, some with cage lights. I wonder about the men who walked these corridors and lived in these rooms. In one corner of a room is a broken bed frame, and I try to piece together how the room looked when the boat was afloat; the confusion of panic-stricken men scurrying for safety when the blast of the torpedoes hit. It's like a flashback to 1942. The end of my dive is near, so I head back to the anchor line.

After a decompression stop I ascend, breaking the surface of the water to a different world, one I'm more accustomed to. As the grapnel chain is heard coming over the side of the pulpit, we head for home. As Old Barnegat lighthouse bid us goodbye, now in the evening haze it also welcomes us back. We leave with a memory that will last a lifetime.



*For much
more than just
a diving vacation...*

INTRODUCING . . . SURFSIDE'S NEW DIVE OPERATION located on the island of SAINT EUSTATIUS, NETHERLANDS ANTILLES at the lovely "OLD GIN HOUSE" hotel. INTERESTED IN DIVING SOMEPLACE SPECIAL? SOMEPLACE WHERE THE MARITIME HISTORY IS SO THICK YOU CAN TOUCH IT! Imagine diving in a place where very few people have ever been diving before, and also consider this . . .



- St. Eustatius was the first foreign power to recognize the sovereignty of the United States on Nov. 16, 1776.
- "Statia" was the original "Golden Rock"—the wealthiest island in the Caribbean during the 17th & 18th century.
- In its 18th century heyday over 3000 ships a year made Statia's one Bay their port of call.
- There existed on Statia a maritime and commercial exchange such as the world never before had known.
- Ships of every design and flying flags of all colors anchored in Statias Bay.
- Virtually all commerce of any importance, honest or illicit, was diverted through Statia.
- Practically all traffic between Europe and the American colonies was conducted through Statia.
- Noted historians believe that between battles, storms and collisions, there are more than 200 ships sunk in Statias untouched bay.

- April 6, 1690, an earthquake casts more than half the town into the sea—warehouses full of plunder and contraband.
- Access to dive historical ST. KITTS (6 miles), SABA (13 miles), ST. MAARTEN (34 miles).
- Crystal clear 80° water; friendly native people; many interesting places to visit, uncrowded beaches.
- Ongoing archaeological projects, research library, museum, underwater photography.
- Excellent accommodations with absolutely great food—THE OLD GIN HOUSE—THE INNS AT GALLOW'S BAY.

WE ARE NOT SURE WHAT YOU WILL FIND ON THE BOTTOM WHILE DIVING WITH SURFSIDE AT STATIA. YOU WILL FIND *SURFSIDE-STATIA* TO BE A PROFESSIONAL, ACCOMMODATING, WELL EQUIPPED, WELL RUN DIVE OPERATION; YOU WILL FIND EXCELLENT FOOD AND ACCOMMODATIONS AND YOU WILL FIND A BEAUTIFUL ISLAND WITH FRIENDLY PEOPLE. CALL OR WRITE OUR U.S.A. SALES OFFICE FOR MORE INFORMATION AND RESERVATIONS.

SIMPLE ADDITION . . .

SURFSIDE ON SEVEN MILE BEACH + SURFSIDE AT RUM POINT (NORTH WALL) = ULTIMATE VACATION



The people at Surfside are constantly trying to give our customers everything possible to make their Cayman vacation complete. It is for this reason that we have opened up a new location on Cayman's North Side. We now offer you total access to the fabulous North Wall.

Introducing . . . SURFSIDE—RUM POINT

Our newly opened dive operation at Rum Point on Cayman's beautiful North Side allows us to offer packages with a number of fine resort hotels and condominiums. Individual/group packages at the beautiful *Retreat at Rum Point* and at *Villa Caribe Resort*, complete with excellent native and American cuisine, are now available at reasonable rates.

SURFSIDE WATERSPORTS ON SEVEN MILE BEACH

with locations at Beach Club Colony Resort and at Le Club Cayman Resort Hotel, continues to offer dive packages with a variety of excellent hotels and condominiums on Seven Mile Beach. These locations serve as our complete watersports headquarters. For fun and enjoyment that doesn't exclude anyone, we offer parasailing, jetskiing, paddleboating, windsurfing, sailing, glassbottom boat trips, snorkel trips and much more.

NOW YOU CAN HAVE THE BEST OF BOTH SIDES . . .

A Surfside dive package will allow you to dive at both locations. If you so desired you could dive the North Wall in the morning and the wreck of the "Oro Verde" in the afternoon! Perhaps you want to dive the wall in the morning and use your watersport voucher (free with dive package) to go parasailing! If your dive is blown out on the North you can dive with us on the West Side, you will always have great diving available with Surfside. Perhaps you want the tranquility of the North Side for three days and the activity of Seven Mile Beach for three days . . . just let us know and we'll arrange it.



Call or write today.

SURFSIDE U.S.A. SALES OFFICE

330 South Main Ave., Scranton, PA 18504

(800) 468-1708

In Pennsylvania (717) 346-6382
In Grand Cayman (809) 947-4224

MEMBER



MAKE NO MISTAKE ABOUT IT, WE PRIDE OURSELVES ON BEING THE MOST ACCOMMODATING DIVE OPERATION IN THE WORLD.

Double Bonus Dive!



Grand Cayman

Miami \$399
Houston \$499



Bob Soto's Diving, the Cayman Islander Hotel, and Cayman Airways have joined forces to bring you this Double Bonus Dive Program.

We offer all the finest diving and comfortable accommodations you've come to expect, with some amazingly low prices you'll love!

Our Double Bonus Dive Program gives you a spacious room with color TV at the Cayman Islander. 2 tank AM boat dive daily, unlimited shore diving and 1 night dive. Plus roundtrip airfare from Houston or Miami, starting at just \$399 for a 4 day/3 night visit.

Package Valid Dates: Dec. 15/85 - April 14/86

Call Toll-Free:

National Wats: 1-800-327-3835 • Florida Wats: 1-800-233-8880

Hollywood (305) 987-8880 • Miami (305) 620-6917

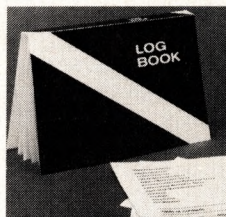
5920 Rodman Street • Hollywood, Florida 33023

Prices subject to change without notice

circle #206 on Reader Service Card

NEW! FINALLY THERE'S A QUALITY LOG BOOK

- Includes Sections For Recording
- Divers Personal Record
- Educational Records
- Pre-dive Check Lists
- Equipment Maintenance Record
- Your Favorite Dive Shops and Dive Boats
- Divers Record and Worksheets for 32 Dives



Dealer Inquiries Invited

Compact 3-Ring Binder • Virtually Indestructible • Water and Oil Resistant • Paper is Impervious to Water, Mold, and Mildew • Refill Pages Available • Size 10" by 6 3/4"

Send \$15.95 + 2.50 Shpg. and Hdg. per Book to:

PAPER 'N' INK 1442 Lincoln Ave., Suite 350
Orange, CA 92665 714/632-9949

circle #207 on Reader Service Card

THE NEW ewa master

Take any Camera under water

Rip Schulke, author of "Underwater Photography for Everyone":

"EWA's new MASTER underwater camera housing is easy to operate even at a depth of 100 feet. I can use it with any of my cameras and a variety of lenses, motors, and strobes. It is the ideal camera housing for vacationers and travelling pros alike. Many models available. For more information... write or call:

PIONEER & COMPANY
216 Haddon Ave.
Westmont, NJ 08108

1-800-257-7742
(In NJ - 609-854-2424)

circle #208 on Reader Service Card

WRECK FACTS

(Continued from Page 12)

Pinkerton Agency's involvement with a gold shipment could ever be confirmed. I don't think there was gold aboard the *Dean Richmond*. But who knows," Kozak smiled, "someday somebody might shatter my theory."

Theories of what constitutes a historic shipwreck; should Admiralty Law be applied to historic wrecks; and what national standards might be adopted for historic shipwrecks, ran rampant in panel discussions held during the four-day session. No conclusion was ever reached on how to define a historic shipwreck. Admiralty Law is still favored by most salvors and sport divers, while a national standard for shipwreck exploration, salvage and preservation remains an academic argument with little practical value or meaning.

The most practical aspects of the symposium were the wreck diver and archaeological diver certifications offered to qualified applicants. Four open water shipwreck dives, classroom instruction and hands-on use of equipment for survey and excavation work were included in the package. Mike Mitchell, Hollywood, California said: "The hands-on part of the archaeological diver certification was great. I learned how to use a magnetometer and how to map, grid, excavate and preserve a wreck. We dove on a 19th century steamship and three 20th century wrecks including the *Mercedes I*."

Mike's diving buddy, Bruce Hector, Van Nuys, California said: "We learned the ABCs of doing an archaeological survey. We learned how to date and identify wrecks and how to implement metal detectors and sidescan sonar. Personally, I gained a great knowledge and appreciation of shipwrecks from the classes and actual experience."

Experience, practical application and precise methods were the major concepts stressed by pioneer salvage diver Marty Meylach who spoke on magnetometry. Meylach, author of the classic Doubleday publication, *Diving to a Flash of Gold*, took the audience through a step-by-step search for objects under the sea bottom through the use of magnetic surveys. Meylach made discoveries off Padre Island, Texas, then used an old map and magnetometry to locate galleons of the Spanish treasure fleet of 1733, sunk in a hurricane off the Florida Keys.

Locating shipwrecks was one highlight of the symposium program, while photographing them was another. Paul Tzimoulis, of SKIN DIVER Magazine, taught divers how to photograph their favorite shipwrecks. Using slides of wrecks in Truk Lagoon, the Virgin Islands, the Netherlands Antilles and other parts of the world, he demonstrated long, medium

M/V ISLAND FANTASY

90' Luxury Mini Cruise Ship



FRANK'S DIVE SHOP

Riviera Beach, FL 33404;

301 E. Blue Heron Blvd.

305-848-7632

OPEN HOUSE AND COCTAIL PARTY DURING D.E.M.A. ON BOARD 2 TO 4 DAILY.

FOR MORE DETAILS SEE US AT OUR BOOTH IN THE BAHAMAS EXHIBIT.

and close-up shots. Various cameras and lenses were discussed as well as concepts of romantic images of shipwrecks in intriguing and awesome settings. Many divers were able to put these helpful hints into immediate use several hours later when they dived on the sunken freighter, *Mercedes I*.

Peter Hess, Dover, Delaware, was lauded for his talk on the China Wreck, an English ship that sank in the Delaware Bay in the late 1800s. Loaded with iron-stone chinaware—commonplace earthenware of little value—the ship became a popular sport diving site only 50 feet deep. But Indian River Recovery Company recently placed a claim on her, upsetting sport divers who have been salvaging an occasional cup, saucer or plate from the wreck for the past 15 years. Sport divers have formed Ocean Watch, an organization that is fighting to retain the right to dive on this wreck of no apparent value. Hess says the courts will decide the outcome of the dispute.

Chuck Mitchell, Key Largo, Florida displayed his popular Noon Cannons, salvaged in 1968 from the galleon *Nao San Ignacio*. Seven inches long, weighing two pounds each, the miniature cannons were used to signal the ship's pilots to take their noon sun sighting. The cannons are so unique and rare that Mitchell keeps them in a bank vault, but consents to display them on special occasions.

Sandy McKinney and her son, Sean, also provided a special display. Using an electrolytic bath, they showed how to clean and restore silver coins found on the *Atocha* site. Some of the coins, black and unidentifiable, were restored on the spot to a shiny, legible condition. Many of them dated back to the 1600s and had been salvaged a little more than a week prior to the symposium.

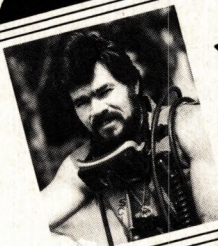
Divers from all over the United States and Canada enjoyed the symposium sponsored by the Marine Archaeological Advisory Council of the Broward County, Florida Historical Commission. Divers came from other countries too, including England, Australia, South Africa and the Dominican Republic.

Jeff Pollard, this year's symposium coordinator, and Bill Raymond, last year's organizer, were pleased with the outcome and offered special thanks to the Tourist Development Council. Kassy Keyes, Ft. Lauderdale freelance writer said: "If this was the Second Greater Ft. Lauderdale Shipwreck Symposium, I can't wait for the third! It was educational and entertaining. It assembled sport divers, salvors and marine archaeologists for films, lectures, dives and discussions that fostered understanding and appreciation for all shipwrecks. I'm looking forward to it again next summer."

Safe diving to all. Be sure to include a stamped, self-addressed envelope when writing: Ellsworth Boyd, 1120 Bernoudy Rd., White Hall, MD 21161. >#210

DISCOVER OUR CARIBBEAN

Peter Hughes



**DIVE
BONAIRE**
FLAMINGO BEACH HOTEL & CASINO



Casual and comfortable...a complete dive village...
endless jungles of coral...more than 40 dive sites...

Dive Bonaire has the Caribbean's largest and most versatile fleet of dive boats allowing regular access to the virgin areas of Bonaire's northwest coast and south shores...areas seldom visited by others.

Dive Bonaire and every other Peter Hughes dive operation assures you of an unforgettable underwater experience.

Call 800-252-6323 in New York State
800-847-7198 all other states

Peter Hughes
DIVING INC.

Full cooperation with travel agents

 DIVE HOTELS

PLEASE SEND ME INFORMATION ON DIVE PACKAGES IN THE CARIBBEAN:

☐ Aruba ☐ Barbados ☐ Bonaire ☐ Cayman Brac ☐ Curacao

Name _____

Address _____

City/State/Zip _____

Dive Hotels, 520 West State Street, Ithaca, New York 14850 (607) 277-DIVI

SD 12/85

circle #210 on Reader Service Card



NEW-SCUBA REFRESHER COURSE CONVENIENT-VIDEO CASSETTE

Demonstrated by Qualified Diving Instructors

Includes:

Basic Pool Training
Advanced Pool Training
Potential Diving Hazards
Open Water Diving

A SAFETY MUST FOR:

- C-Card Holders who do not dive regularly
- Resort Dive Masters
- Scuba Rental Shops • Dive Clubs

To Order: Send \$59.50 to COWART MARINE ENTERPRISES

P.O. Box 23399, Ft. Lauderdale, FL 33307

Specify: VHS-BETAMAX or 3/4 inch—Telephone (305) 563-9808

circle #211 on Reader Service Card

DIVE LANAI, HAWAII

Lanai is a small island just off the coast of Maui. We're 5 minutes away from the best diving Hawaii has to offer. Over 40 different sites, with something different at each one . . .

Hotel Lanai is a small resort dedicated to serving divers and underwater photographers. Personalized service, exciting diving, and the unique style of the Hotel Lanai make it the diver's choice in Hawaii. Of course, when you're not diving, we've got excellent meals, a friendly bar, secluded beaches, and beautiful scenery to keep you in love with Hawaii.

Package price:

\$399.00

(per person, dbl. occupancy)

includes: 7 days, 6 nights accommodations

6—two-tank boat dives
transfers

For more information: **Call 1-800-367-8047**

HOTEL LANAI, P.O. BOX A-119, LANAI CITY, HI 96763

(808) 565-6605

circle #212 on Reader Service Card

*Happy
Holidays!*

PDIC

A WORLD OF TRAINING

WITH PDIC & CMAS

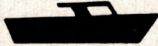
DIVE INTO 1986 BY VISIT-
ING US AT THE DEMA
SHOW, BOOTH 1306,
ORLANDO, FLA.

Professional Diving Instructors Corporation, P.O. Box 772, Scranton, PA 18501 (717) 342-1480

SUNSET AT 7:30 AM?

**7:30 AM
SUNSET**

After a leisurely breakfast,
take a boat dive at
9:00 a.m.



**12 Noon
SUNSET**

Lunch at a thatched bar overlooking
the Caribbean

3 PM SUNSET

Shopping in our boutique,
followed by ocean-side cocktails.



**7 PM
SUNSET**



SUNSET

(Watch out for the
green flash!)



8 PM SUNSET

Dine in the fine Sunsetter restaurant.

10 PM SUNSET



Night dive off
the shore.

**12 MIDNIGHT
SUNSET**

And so to bed...



SUNSET

A 24-hour paradise for divers - all in one location

HOUSE



2 for 1 Special from
7 Sept. - 15 Dec. '85

Sunset House, P.O. Box 479, SD Grand Cayman, B.W.I.
Phone: (809) 949-5966 (Direct Dialing from U.S.)
Telex: 4367 U.S. Number 1-800-854-4767

circle #215 on Reader Service Card

DIVING MEDICINE

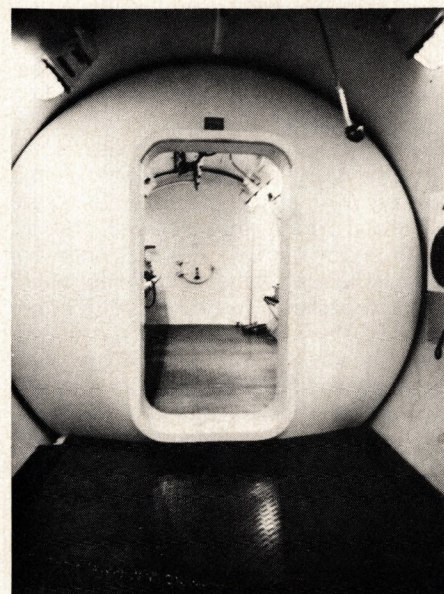
(Continued from Page 14)

the diver experiencing ear clearing difficulty seeking a diving ENT doctor. Realistically there are only a handful of such physicians in the entire United States.

Our best advice to these callers is often to locate a reputable ENT and offer DAN's number as a resource if the doctor has questions.

Part of the problem of compiling a directory or list of diving physicians is that of credentialing. Currently there is no credentialing of diving physicians. The Undersea Medical Society is attempting to address this problem. Initial plans call for testing of physicians who are not in the practice of diving medicine. They would then be available for referrals for examination of divers, not for the treatment of diving accidents. It must be remembered that questions of legal liability are involved in credentialing and whenever a referral is made to another physician.

Why are there not more hyperbaric chambers and diving physicians? The



answer is that there is not an overwhelming need and simple economics. There are no more than 620 dive injury treatments per year for the whole U.S., Canada and Caribbean and the busiest chambers at Catalina, California and Miami, Florida, treat only about 50 patients each per year.

This constitutes neither a national health problem large enough to institute diving medicine in health care education nor a means of earning a living. However, the cost to society for the loss of productive persons and the health maintenance of disabled divers can easily run in the millions of dollars.

Most hospital based chambers exist to provide hyperbaric oxygen therapy (HBO) for non-diving related problems.

GREAT DISTANCE AND GREAT EXPENSE

No hospital or physician makes a lot of money from treating divers. Worse, many divers have skipped paying their hyperbaric treatment bills or their health insurance has refused to pay.

In spite of divers not paying their bills, and the disruption in the schedule of paying HBO patients, most chambers continue to voluntarily accept DAN's referrals. However, a few have begun to deny divers for financial or logistical reasons. This is of great concern to DAN and other diving physicians. DAN is presently investigating insurance for divers.

The treatment, and especially transportation of an injured diver, can be extremely expensive. The bill for hyperbaric treatment can range from \$500 to \$1500 for a single standard treatment table. However, if several treatments are given, or if physical therapy is involved, the bill can add up quickly. There will be extra charges for a chest x-ray, routine lab work, hospital bed, doctors fees, emergency room charges, etc. anytime a diver enters a hospital. The following figures give a sample of a routine treatment of an injured diver who recovered in three days:

Emergency Room charge.....	\$ 150
Chest x-ray.....	60
Routine admission labs.....	80
Emergency hyperbaric doctor fee.....	80
USN treatment table 6 (extended).....	800
USN treatment table 6 #2.....	800
HBO treatments 2 hrs. 3 ATA (33 fsw) x3.....	1,200
3 days non-critical care hospital bed.....	1,000
Subtotal	\$4,090

This assumes this individual received free transportation to the chamber, had no further lab, critical care or physician fees. Now let's add an air ambulance evacuation from the Caribbean, two nights in a critical care bed, a week of HBO treatments and four weeks of physical therapy as an inpatient.

Air ambulance from Caribbean.....	\$10,000
2 nights critical care.....	2,500
Routine admission lab.....	450
Emergency hyperbaric consult.....	80
2 USN table 6.....	1,600
6 HBO treatments 3 ATA (33 fsw) x 2 hrs.....	2,400
5 wks. non-critical care bed.....	9,800
4 wks. inpatient physical therapy 1 hr. 2x day.....	2,400
4 wks. outpatient physical therapy 1 hr. 1x day.....	1,200
Subtotal	\$30,400

The above is a worst case scenario. It is conceivable that a diver who responds well to an initial treatment will have a bill well under \$2,000, which is certainly less than the delivery of a healthy baby or minor surgery. Only a handful of diving injuries a year require the expensive interventions outlined above.

Generally, most health insurance will cover hospital and hyperbaric charges if provided within 72 hours of the injury incident. However, insurance may not cover that \$10,000 air ambulance ride.

Why does the air transport of a diver cost so much? Why can't the military or

DISCOVER OUR CARIBBEAN

Peter Hughes



**CAYMAN BRAC
DIVE TIARA**
TIARA BEACH HOTEL



Comfortable and intimate dive resort...spectacular diving...beautiful beach...modern dive facilities...

Dive Tiara's new custom designed dive boat will make Little Cayman more accessible than it's ever been before.

ALL-INCLUSIVE RATES for the utmost in a complete and carefree dive experience. Ask about our Grand Cayman/Cayman Brac package and common-rated airfares.

Peter Hughes
DIVING INC.

Call 800-252-6323 in New York State
800-847-7198 all other states

Full cooperation with travel agents



Divi Hotels, 520 West State Street, Ithaca, New York 14850 607-277-DIVI

circle #216 on Reader Service Card

TRIPPING OUT TO THE VIRGIN ISLANDS OR SUNNY FLORIDA?

Take along your best diving buddy in the January

skin diver

**After Miami's wrecks, dive Key Largo's
DIVE JOHN PENNEKAMP'S UNDERWATER STATE PARK
with Key Largo's oldest and best charter service ...**

Harry Keitz's

AMERICAN DIVING HEADQUARTERS, INC.

Serving Pennekamp Park since 1962.

Call/write for reservations or information:

AMERICAN DIVING HEADQUARTERS

Rt. 1, Box 274B, Key Largo, FL 33037

In Florida (305) 451-0037

TOLL FREE: 1-800-634-8464

All major credit cards accepted, including telecheck

circle #217 on Reader Service Card

"No Rock 'n Roll"

(MOTION, THAT IS)



ABOARD
BOTTOM TIME II
OUR NEW HIGH-TECH
CATAMARAN

- ULTRA STABLE
- TWO PERSON CABINS
- GOURMET CHEF
- TWO DIVE PLATFORMS
- FULL AIR-CONDITIONING
- PROFESSIONAL CREW
- HIGH SPEED 24K+
- FILM LAB

CONTACT: BOTTOM TIME ADVENTURES, P.O. Box 11919
FT. LAUDERDALE, FLORIDA 33339; (305) 561-0111 (M-F 9-5)

circle #218 on Reader Service Card

UNSPOILED*

*SKIN DIVER calls Little Cayman "...probably the last true virgin diving in the Caribbean." With 20 years experience, Sam McCoy knows the water of Little Cayman as well as anyone. For package rates and information on Sam McCoy's Lodge write or call Road Least Traveled, 14 Rochambeau Ave., Ridgefield, CT 06877, (203) 438-5663.

B.V.I.

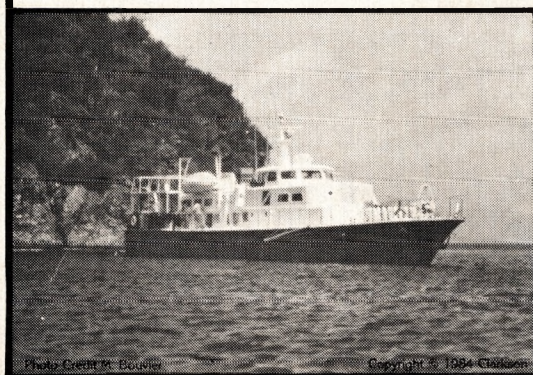
You think this means **British Virgin Islands**. It also means great diving year round. We guarantee that you will dive day and night, have more food than you can eat, and more fun than you can imagine.

It really means **Best Vacation Investment!**



Tropic Bird

THE live-aboard dive boat
in the British Virgin Islands.



BEST DOLLAR VALUE
12 Double Staterooms
Fully Airconditioned
Unlimited Diving
Guaranteed Diving
Night Dives
TV Movies & Games
Sun Deck & Bar

Call Toll Free
800/524-2027
800/526-1394
In NJ 201/256-9115

Photo Credit: M. Bouvier

Copyright © 1984 Clarkson

circle #219 on Reader Service Card

DIVING MEDICINE

Coast Guard provide transport? Fixed wing air transport of a diving casualty is sometimes necessary because of the long distance between the few available chambers. This is particularly true in the Caribbean where long distances separate the diver from help. It is expensive because the diver must avoid a cabin altitude greater than 1,000 feet (most airlines are pressurized to 8,000 feet). Few aircraft can pressurize to sea level and those that can must fly lower. This burns more fuel and increases the cost.

The Coast Guard and military have such aircraft but are prohibited by law from competing with private enterprise, such as a private air ambulance company. The Coast Guard and military have provided transport to indigent civilians in life or death situations. What constitutes indigent or a life or death situation, however, is not always clear. The military and Coast Guard have regularly provided helicopter transport of divers when the distance has been under 300 miles. The ability of the Coast Guard and military to provide assistance to divers varies from location to location.

Generally, transportation arrangements are the biggest time delay factor in any dive accident once the injury has been recognized. Because of this and the reasons above, DAN is investigating air ambulance insurance for divers. Several companies do provide air ambulance insurance but most cost over \$100 per individual per year.

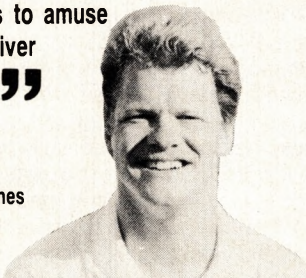
RECOGNITION OF SYMPTOMS

While transportation arrangements can cause a delay of several hours in the management of a dive accident, lack of recognition of symptoms can cause a delay of days or complete failure to recognize the diving injury. This may result in ineffectual treatment or no treatment at all. Why are such symptoms not recognized early? Symptoms are recognized late or not at all because of a lack of knowledge on the part of health care workers and divers. Divers have traditionally expected a diving accident to be a worst case scenario e.g., an unconscious diver coughing up blood, having convulsions and perhaps requiring CPR. The bends is thought of as excruciating pain in the joints. These situations are rarely the case. Most victims of a diving accident are walking and talking but may have modest pain or weakness, numbness or tingling. Often the discomfort is not so great that someone would seek emergency care or even not go to work. Nevertheless, the person has a dive injury and needs treatment. These divers will often wait 24 hours or several days before deciding they have a problem.

WHY DIVE GRAND BAHAMA?
Reason No. 19

“ We have great reefs, a super wreck and Freeport has lots of activities to amuse a non diver as well. ”

Chris Holmes
UNEXSO
Instructor



Compare facilities and prices. Then you'll know why the famous Underwater Explorers Society is famous.

Write for our Dive Destination Checklist and color brochure, and we'll send you a certificate for a FREE DIVE in the Bahamas! One certificate per customer, please.

**UNDERWATER
EXPLORERS
SOCIETY**

UNEXSO

P.O. Box F2433 Dept. K
Freeport, Grand Bahama (809) 373-1244

circle #220 on Reader Service Card

DISCOVER OUR CARIBBEAN

Peter Hughes

**UNDERWATER
CURAÇAO**
GRAND OPENING DECEMBER, 1985



Curacao...unhassled...unhurried...unspoiled...unusual. Ultra-modern dive facility...complete photography services with 24-hour E-6 film processing...state-of-the-art dive boats custom designed for Peter Hughes. Adjacent to the Curacao National Underwater Park and Curacao Seaquarium.

Peter Hughes
DIVING INC.

Call 800-252-6323 in New York State
800-847-7198 all other states

Full cooperation with travel agents



DIVER HOTELS

Diver Hotels, 520 West State Street, Ithaca, New York 14850 607-277-DIVI

circle #221 on Reader Service Card

King Neptune is calling



EXUMA AQUATICS
8 days/7 nights
Diver \$708.00
Vacationer \$468.00
3&4 nights available

- Includes full breakfast & dinner (dine-around)
- FREE windsurfing, sunfish, tennis, bicycles and water taxi to nearby island
- 2 tank dives/day; blue hole and cave dives, daily reef trips and snorkeling available
- Complete photo lab, rentals and instructions
- Power boat rentals and bone fishing available

CALL DIVE EXUMA
800-231-0310
P.O. Box 23157
Ft. Lauderdale, FL 33307
or
809-336-2600
P.O. Box 49
Georgetown, Great Exuma,
Bahamas

circle #222 on Reader Service Card

Dream On... !



The Cayman Dream Vacation Package continues at The Royal Palms Hotel on Seven Mile Beach.

Dive Grand Cayman this winter for as little as
\$499 per person, 8 days/7 nights (dbl. occupancy)
(Gov't tax and gratuities not included)
Effective December 16 - April 6

SCUBA TOURS INC.

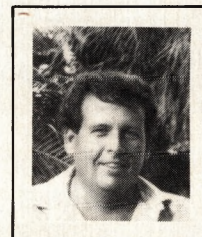
1-800-526-1394

In New Jersey: (201) 256-9115.



DON FOSTER'S
Dive • Grand Cayman Ltd.

Serving Dive Shops,
Clubs, Travel Agents
and Individuals



Cayman Airways

circle #223 on Reader Service Card

BONAIRE SCUBA CENTER

BONAIRE BEACH HOTEL



*Our Most Popular
Land Package*

\$620⁰⁰

(Non-Diver - \$458)
Dec. 15 thru April 7

*Other Package Prices
Available Upon Request*

Bonaire Beach Hotel - 145 spacious, air-conditioned rooms situated on 12 sprawling acres; 600 ft. of white sandy beach; 2 regulation tennis courts; volleyball; Sunfish; Windsurfers; mini golf; bicycles; 2 restaurants; 3 cocktail bars; nightly Happy Hour; Black Coral Casino; disco; live entertainment; specialty nights.

Bonaire Scuba Center - Your choice of aluminum or steel tanks; spacious flattop boats; experienced, friendly dive guides; E-6 photo processing lab; personalized diving program; specialty packages.

For more
information and
reservations, call:

800-526-2370

in New Jersey 201-566-8866

or
write: **BONAIRE, P.O. Box 775, Morgan, New Jersey 08879**

circle #224 on Reader Service Card

DIVING MEDICINE

Physicians and health care workers have difficulty recognizing diving related symptoms because they have not been trained to look for them. With fewer than 1,000 injuries and deaths from diving per year, health care associations and education programs see no reason to provide education in diving medicine.

What can be done to aid early recognition of diving injuries? Divers should read the DAN Manual and carry both it and their membership card to dive sites. DAN members should encourage other divers to join DAN and help provide local emergency rooms and rescue personnel with information on DAN and the DAN Manual.

GROWTH OF THE SPORT

Finally, the sheer growth of the sport is a factor in the diving accident problem. It is a credit to the diving industry and the diving public that the accident rate has remained stable while the population of certified divers has doubled in the past five years.

With the number of divers growing and recreational diving spreading across the globe, it will become increasingly important for all involved in diving to keep diving safe.

SCUBA WORLD MOVE

Brent Feinman's Scuba World is moving to Lauderdale by the Sea, Florida. The new location is one block west of the beach at 4339-A Ocean Drive (A1A), one block south of Commercial Boulevard.

All levels of PADI scuba training from basic to instructor are taught, with emphasis on safety and continuing education. A variety of specialty courses is available including underwater photography. A photography department including film, camera equipment and complete processing is available. Scuba World specializes in Cibachrome printing.

For information regarding sales, trips, classes, rentals and boat charters contact Brent Feinman's Scuba World, 4339-A Ocean Drive, Lauderdale by the Sea, Florida 33307, (305) 587-7234.

KILBRIDE U/W TOURS

Virgin Gorda is the home of Kilbride Underwater Tours, a dive operation that offers resort courses and some of the finest diving in the British Virgin Islands. For years Kilbride has been hosting the Cousteau Society's Project Ocean Search and Helen Turcotte's diving medical seminars. Furthermore, Kilbride's is open 365 days a year.

Kilbride Underwater Tours possess some of the most unique staff members in the diving world. There are three generations of instructors, all are presently active and teaching, including treasure

MASTER CHARGE & VISA ACCEPTED

To Order - Call Toll Free
800-221-5662

ikelite

Underwater Systems ...
CALL

OPEN SUNDAY
10:00 A.M.-4:00 P.M. EST
DAILY 9-6 • FRI. 9-1 • CLOSED SAT.

Call Now & Say ... "Charge It!"
(212) 807-7474

From CANADA Call 800-634-4009

UNDERWATER PHOTO EQUIPMENT

*Free extension tube set with Nikonos V body

Minolta Weathermatic A	59.95
Hanimex 110 Amphib	89.95
Hanimex 35mm Amphib	149.95
Flash for above	99.00
Macro Lens for above	44.95
Fujica HD-M	149.95
*NIKONOS V w/35 F2.5	364.90
NIKONOS Case	29.95
NEW! 15/2.8 w/finder	869.00
28/3.5	179.00 80/4
NEW! 20/2.8	CALL
28/2.8 LW	124.95

B&H Photo Corp.
119 West 17th Street
(Bet. 6th & 7th Aves.)
New York, NY 10011
(212) 807-7474

• INFORMATION
• NY STATE ORDERS CALL

MAIL & PHONE ORDERS ACCEPTED. NY residents add sales tax. Personal checks must clear. Fast delivery with certified check or money order. M.C. & Visa users give Card No., Bank No. & expiration date. Min. handling and shipping up to 3 lbs. \$5.50; over 3 lbs. to 50 lbs. Send 50¢ for each additional pound. Insurance: add 25¢ per \$100. Not responsible for type errors. Outside of Cont. U.S.A. add approx. shipping. Ship rates are for U.P.S. Prices are current as of date of insertion and subject to change without notice.

All items are sold with U.S.A. or Int'l Warranty.

*NIKONOS SB102 w/case	549.95
*NIKONOS SB103 w/o case	264.90
Close Up Kit	119.90
Surpak Marine 32 Kit	199.95
Sekonic L164B Meter	82.95
Pelican 1400, 12X9X5	49.95
Pelican 1500, 17X11X6	71.95
Pelican 1600, 22X17X8	120.00
Pelican 1700, 50X11X6	144.95
Morris Aqua F 111	179.95
*\$100 DIVE CERTIFICATE	

circle #225 on Reader Service Card

SCUBA PACKAGES from . . .

\$199⁰⁰

**BIMINI
NASSAU
ABACOS
ANDROS
EXUMA
FREEPORT
CHUB CAY
WALKERS CAY
HARBOUR ISLAND
SPANISH WELLS**

It's Better In The Bahamas

UNCONFUSED

Need a friend in the travel business?
Too many brochures, coupons, ads?
One says better, the other says best.

Let Aqua Adventures
UNCONFUSE you...

with the resort
best suited for
YOU!

We've Got Your Island.

Visit your Travel Agent or Dive Shop and
DEMAND an Aqua Adventures Dream Dive Vacation!



Aqua Adventures, Inc.

318 Lexington Ave., New York, N.Y. 10016 • (212) 686-6210



circle #226 on Reader Service Card

HYPERTECH INC.
UNDERWATER VIDEO SYSTEMS

Professionals like Stan Waterman and Stephen Frink use Hypertech equipment.

MODULAR EQUIPMENT
VIDEO HOUSINGS
with zero to infinity sharp focus

HYPER-LIGHTS
u/w video lights
up to 600 watts
no hot spot,
long burn time,
wide angle beam

HYPER-SADDLE
mounts on TEKNA
u/w scooter

**HYPERTECH EQUIPMENT IS
USED FOR TV BROADCAST**
CALL OR WRITE

P.O. Box 10513, Pompano Beach, FL 33062
(305) 782-4448

circle #214 on Reader Service Card

PHOTO EQUIPMENT

BUYING OR SELLING
SHUTTERBUG, published monthly, is filled with hard to find bargains like cameras, lenses, accessories, film, and darkroom equipment from individuals and new equipment dealer close-outs.

Subscribe now for only \$15 a year. Satisfaction guaranteed. Send check or money order to Dept. S008, P.O. Box 1209, Titusville, FL 32781. For faster service charge to Visa or MC by calling 1-800-327-9926. In FL call 1-305-269-3211.

shutterbug

circle #213 on Reader Service Card

MARINE AND LAND SEARCHING WITH PROTON MAGNETOMETERS BETTER ASK "WHAT'S A MAGNETIC STORM?"

BECAUSE BUYING A MAG CAN BE BIG BUCKS, they are once or twice monthly, possibly days long "super screams" in the earth's magnetic field that prevent the traditional 1 sensor-location mags from hearing the whisper of a distant, say 1/10 gamma, search object. More frequent and important, however, are the magnetic "screams" known as micropulsations with strengths of tens of gammas down to significant fractions of a gamma - minute to minute, hour to hour, come and go throughout every day. The 3rd disturbance, diurnal variations, are gradual and therefore insignificant if your mag is designed free of scale change needs.

L3, \$900 - L1, \$600 - WHY PAY \$75,000 FOR 1/50 GAMMA MARINE, MAGNETIC STORM, MICROPULSE (ETC.) - IGNORING MAGS? 1/50 GAMMA SENSITIVITY WITH LIEBHARTZ'S DOM TIMING.



This winds down 7 years of perfecting this strange, new form of magnetic searching, HYPER DIFFERENTIAL MAGNETOMETRY. Our instrument continued unpacking its math and physics during this 7 year brain-storming period, when direct exchange of information occurred between the inventor, manufacturer and our first, plucky, innovative customers, our R & D outlabs. During this time no dealerships were started. Neither the information-garbling nor the responsible type came between the company and the mag owner. As a result a hassle-free very amazing L3+ is available at dealers. Do you older readers remember how beautifully sculptured, how star-warish those vacuum tubes were and how they were replaced by that cheap, plastic transistor. Magnetometry changes too.

Detects 1 lb. steel at 20 ft., 64 lb. at 80 ft., 2 tons at 320 ft., 125 tons at 1280 ft. (mere 1/10 gamma cond'n!!). Send for free info or \$2 (\$3 foreign) for complete info. Send \$19 (\$25 foreign) for 61,000 word, 54 fig. book SEARCHING WITH 1 AND 2 SENSOR-LOCATION MAGNETOMETERS. Phone not always attended so call nights and weekends too. Avoid early mornings. (214) 891-4925. M. L. DALTON RESEARCH, 8035 ABERDEEN AVE., DALLAS, TEXAS 75230.

hunter Bert Kilbride; PADI instructor and manager of Kilbride Underwater Tours, Gary Kilbride; and NAUI instructor and son of Gary, Patrick Kilbride.

Pat is the runner up to the Our World-Underwater Scholarship 1985/1986. He just completed his NAUI Instructor Training Course. Pat has taught rescue courses and is teaching diving in Florida while attending his junior year at the University of South Florida. Among the three Kilbrides, there are 32 years of instruction. >#>

1985 OUR WORLD-U/W SCHOLARSHIP WINNER

Twenty-three year old Adam Ravetch was recently awarded the 1985 Our World-Underwater scholarship. A graduate student at California State University Long Beach, he is working toward a mas-



ters degree in marine biology and intends to earn a Ph.D. in the same subject.

Ravetch's diving experience includes being a NAUI instructor, support diver at the Catalina Marine Science Center, technical assistant to the Wild Kingdom television show and participating in blue shark studies. He has been diving around the world and taught scuba in Saudi Arabia.

The Our World-Underwater scholarship has been awarded annually since 1973 to a deserving individual planning to pursue a career in a water-related discipline. For information or an application contact Our World-Underwater, P.O. Box 4428, Chicago, IL 60680. >#>

SUBMARINE TRAINING COURSE

During August, Research Submersibles Limited was asked to arrange a submersible pilot training course for a group of six divers from California. The three day course, with the deep diving Perry PD8, was conducted in the waters surrounding Grand Cayman Island. The trainee pilots received both classroom instruction and 20 hours of submersible diving, to a depth of 800 feet on the Cayman Wall.

Other submarine training courses may be arranged later in the year, depending on demand. The courses will be open to both divers and non-divers. Anyone interested should contact: Chief Pilot, RSL, P.O. Box 1014, Grand Cayman, BWI. >#>

Holiday Inn
International Beach Resort
GRAND CAYMAN
CAYMAN ISLANDS, B.W.I.

**WINTER/CAYMAN
SUPER
DIVER**

Includes:

- 3 nights accommodations at Holiday Inn
- Full American breakfast daily
- 2 morning 2-Tank Dives
- 1 Afternoon 1-Tank Dive
- Use of all Holiday Inn facilities—free tennis, free admission to night club and more...

\$299
p/p dbl. occ. incl. 10% Service and 6% Govt. tax

Also Available:

5 NIGHTS
p/p dbl. occ. incl. 10% Service and 6% Govt. tax

- 5 nights accommodations at Holiday Inn
- 4 morning 2-tank dives
- Full American breakfast daily
- 1 Night Dive
- Use of all Holiday Inn facilities—free tennis, free admission to night club and more...

\$499
p/p dbl. occ. incl. 10% Service and 6% Govt. tax

7 NIGHTS
p/p dbl. occ. incl. 10% Service and 6% Govt. tax

- 7 nights accommodations at Holiday Inn
- 6 morning 2-tank dives
- Full American breakfast daily
- 1 Night Dive
- Use of all Holiday Inn facilities—free tennis, free admission to night club and more...

\$699

Bob Soto's
RON KIPP'S
DIVING LTD.

DECEMBER 16, 1985 THRU APRIL 5, 1986
1-800-421-9999

circle #230 on Reader Service Card

It's our underwater holiday



Helix Auto-Marine II Housing

Helix Auto-Marine II Housing. Underwater photographers will find the Helix Auto-Marine II the perfect housing to protect their autofocus cameras. This housing features a built-in viewfinder and patented prism I.R. regulator for easier underwater focusing. Pressure-tested to 100 ft. May be used with the Nikon L35AF, New Canon Sure Shot, Canon AF35M and Canon AF35M.

Helix Auto-Marine II Housing (please specify camera)	84.50
Helix Auto-Marine 21 Slave Strobe	69.95
Helix/Nikon Package w/Auto-Marine II Housing & Nikon L35AF	209.00



Helix/Kamba SLR Housing.

Helix/Kamba SLR Housing. Designed for use with Canon's A-1, AE-1, AE-1 Program, AV-1 with power winder, this housing features reflex focusing and allows external operation of shutter release and aperture. Has standard dome port f/17-100mm lenses and accepts a number of optional ports. Available with a Nikonos II or Nikonos III/IV sync socket connector. Pressure-tested to 200 feet.

Helix/Kamba Housing	249.50
---------------------------	--------

Helix/Kamba Package. Features the Canon AV-1 camera with 28mm f2.8 Canon lens, Canon Winder A and the Kamba underwater housing.

Helix/Kamba package	399.50*
Helix/Kamba Deluxe package, same as above, but also includes Helix Aquafash 28 and bracket	699.50*

Helix/Kamba Accessories.

HK-VIF Internal viewfinder	53.50
HK-OR40-ring set (2-rings)	10.00
NK-GAP Repl. aperture gear	16.00
NK-GFS Repl. standard focus ring	16.00
HK-CFW Focus ring for 17 or 20mm	16.00
HK-SP Repl. standard dome port	135.00
HK-SVP Macro port	135.00
HK-WP Extra-wide dome port	135.00
HK-UNI Universal mount flash bracket	18.00
HK-HAF Aquafash mount flash bracket	18.00

*SPECIAL-limited quantities!

Warrantied Used Equipment Packages

Cosina CX-2 (35mm) w/housing, Seamaster-ST strobe, arm, tray and motor	279.50
Cosina CX-2 camera (35mm) w/housing, motor and Popular F-3 auto-manual strobe w/arm, tray	299.00
Sea & Sea package with 35mm camera, slave strobe and arm	199.00
Nikonos III w/35mm f2.5, Nikonos bulb flash, arm, flash bulb, batteries	349.00
Nikonos IV w/35mm f2.5, Popular F-3 strobe, arm and tray	399.00
Nikonos III w/35mm f2.5, Popular F-3 strobe, arm and tray	449.00
Nikonos II w/35mm f2.5, Aquafash 22 strobe, arm, tray & case (18x13x8")	459.00
Nikonos IV w/35mm f2.5, Aquafash 22 strobe, arm, tray & case (18x13x8")	499.00
Nikonos III w/35mm f2.5, Aquafash 22 strobe arm, tray and case (18x13x8")	549.00
Nikonos V w/35mm f2.5, Aquafash 22 auto/manual strobe, arm, tray & case (18x13x8")	549.00
Nikonos IV w/35mm f2.5, Sunpak Marine 32 strobe, tray and Oceanic ext. tube set	499.00
Nikonos III w/35mm f2.5, Sunpak Marine 32 strobe, tray and Oceanic extension tube set	549.00
Nikonos V w/35mm f2.5, Aquafash 22 strobe, tray and Oceanic extension tube set	549.00
Nikonos III w/35mm f2.5, SB-101 strobe, tray, case and diffuser	595.00
Nikonos IV w/35mm f2.5, SB-101 strobe, tray, case and diffuser	549.00
Nikonos V w/35mm f2.5, SB-101 auto/manual strobe, tray, case and diffuser	595.00
Helix/Kamba housing w/Canon AV-1, 50mm f1.8, and Winder A (demo)	379.00
Helix/Kamba housing w/Canon AV-1, 50mm f1.8 Aquafash 22 and Winder A	549.00
Helix/Kamba housing w/Canon AV-1, 28mm f2.8, Aquafash 22 & Winder A	585.00

Used Nikonos & Accessories

Nikonos II body (mint)	179.00
Nikonos III body	from 239.00
Nikonos IV bodies	from 189.00
Nikonos V body (mint)	249.00
Nikonos V w/35 UNN (mint)	325.00
Nikonos Eveready case for Nik. II	12.50
Nikonos Eveready case for Nik. III	12.50
Nikkor 80mm opt. viewfinder for Nik. II, III	49.95

Used Strobes & Accessories

AMF Swinmaster strobe for Nikonos II w/tray ..	84.50
Helix Aquafash 22 w/arm & tray	from 199.00
Ikelite Housing w/Helix 102 strobe	99.00
Ikelite Housing w/Vivitar 181 strobe	75.00
Ikelite Housing w/Strobonar 880 strobe	179.00
Nikonos bulb flash w/arm & tray f/Nik. II ..	59.00
Oceanic 2000 w/arm & tray for Nik. III ..	129.00
Oceanic 2003 for Nik. III, IV, V ..	289.00
Sonic Research SR-2000 strobe w/slave conn...	185.00
Sonic Research SR-2000 w/arm, tray for Nik. III and case	295.00
Subsea Strobonar w/tray for Nik. III ..	149.00
Helix 6" ED (female) to Nik. I, II (male) ..	39.50
Helix 6" ED (female) to Nik. III, IV, V (male) ..	39.50
Oceanic ED slave adapter	72.50
Oceanic 90-degree ED adapter for Nik. III, V ..	64.50

Miscellaneous Used Items

Bolox aluminum housing for EBM	1750.00
Ikelite housing for Mamiya 645	299.00
Ikelite hsg. w/ED for Canon F-1 w/speedfinder ..	225.00
Ikelite hsg. for Nikon F-2	195.00
Ikelite housing for Kodak X-15/30 camera	49.00
Ikelite housing for Kodak 50/60 pocket	24.95
Ikelite housing for Minolta 430/450E	29.95
Ikelite housing for Kodak X-25	19.95
Nikonos housing for Sekonik L-86	9.95
Sea & Sea motor marine 35 camera	129.00

Subject to prior sale and your approval

NIKON & ACCESSORIES

Helix Special Packages

Nikonos V package w/35mm f2.5 dive light and equipment case	399.00 *
Nikonos V package w/35mm f2.5, dive light, equipment case with foam & Nikonos close-up outfit ..	509.00 *
Nikonos V package w/35mm f2.5, dive light, book, equipment case with foam, Aquafash 28 & light mount	719.00 *
Nikonos V package w/35mm f2.5, dive light, book, equipment case with foam, Aquafash 28 TTL and light mount	789.00 *
Nikonos V package w/35mm f2.5, book, dive light, equipment case w/foam, Nikonos SB-103 ..	675.00 *
Nikonos V package w/35mm f2.5, dive light, equipment case, Nikonos close-up outfit, Aquafash 28, light mount & Underwater Photography Book ..	829.00 *
Nikonos V package w/35mm f2.5, dive light, equipment case, Nikonos close-up outfit, Aquafash 28 TTL, light mount & Underwater Photography Book ..	899.00 *



Nikonos V Special Offer *

With the purchase of a Nikonos V, get a free set of extension tubes plus a \$100 travel certificate from Nikon. The travel certificate is good at six top Caribbean dive resorts. Or, purchase a Nikonos SB-102 or SB-103 with the Nikonos V and receive an additional \$100 travel certificate. Call our Underwater Department at 800/334-ELIX for details.

Nikonos Lenses

10315 15mm f2.8 UN Nikkor IC	699.00
10314 20mm f2.8 UN Nikkor	349.00
10310 28mm f3.5 UN Nikkor	164.00
10311 35mm f2.5 UN Nikkor IC	84.00
10312 80mm f4 UN Nikkor IC	164.00
10313 28mm f2.8 Nikkor LC for land use	129.00
Sea & Sea 18mm f3.5	249.00

Filters for Nikonos

2265 C03SR	14.00
2399 UV haze	14.40
10625 Lens hood/filter holder for 35/80mm ..	3.25

Finders for Nikonos

Ikelite optical viewfinder	67.50
Ikelite sportsfinder	7.20
10758 Nikonos 15mm optical viewfinder (underwater use only)	149.00
10751 28mm Sportsfinder	11.60
10753 35/80mm Sportsfinder	12.00
10756 80mm optical viewfin. (topside use only) ..	57.50
10759 20/28mm opt. viewfin. (U/W use only) ..	98.50
10755 28/35mm opt. viewfin. (U/W use only) ..	92.50
Oceanic optical viewfinder for Nik. III	45.00
Sea & Sea optical viewfinder (18, 28, 35) ...	39.00

Close-Up and Add-On Lenses for Nikonos

Hanimex wide angle lens adapter	94.50
Hydro Photo T-1, T-2 or T-3 close-up for (specify)	35 UNN
Hydro Photo 1228 close-up lens for 28 UNN ..	39.95
Hydro Photo focusing wand for T-1, T-2	14.50
Hydro Photo framer for 28 or 35 UNN (specify) ..	14.50
10708 Nikonos Basic Close-up outfit, w/o case ..	125.00
10705 Nikonos Deluxe Close-up outfit w/case ..	155.00
NIK-Q Close-up lens only for Nikonos I, II, III or IV (repl.)	65.00

Strobes and Accessories

Ikelite Substrobe S for Hanimex/Sea & Sea ...	98.00
Ikelite Substrobe S with Nelson connector ..	123.00
Ikelite Substrobe M (req. optional sync cord) ..	94.00
Ikelite Substrobe M TTL w/cord	199.00
Ikelite Substrobe 100 TTL w/cord	310.00
Ikelite Substrobe 150 TTL w/cord	422.95
Ikelite housing for Vivitar 283/285	79.95

SPECIAL PURCHASE FOR NIKONOS I, II OR III OWNERS

Nikonos underwater flash gun for Nik. I, II (requires batteries and bulb)

SPECIAL	49.50
Nikonos underwater flash gun for Nikonos III (requires batteries and bulb) ..	59.50
SPECIAL	59.50

Nikonos Speedlight SB-101. The handle mount SB-101, for Nikonos III, IV, V offers automatic exposure (non-TTL) control and a remote sensor. GN 50 at ASA 25 topside, and 20 at ASA 64 underwater. Pressure tested down to 160 feet.

10740 Nikonos Speedlight SB-101 without case (limited quantities)	249.00
10747 Nikonos Speedlight SB-101 w/case & diffuser (limited quantities)	279.00
10102 Nikonos Speedlight SB-102 w/case, diffuser, arm and tray	549.00 *
10101 Nikonos SB-102 Head only w/diffuser and TTL sync cord	489.00 *

Nikonos Speedlight SB-103. Designed for the Nikonos V, this underwater strobe features TTL (through-the-lens) auto-exposure control. Pressure tested to 160 feet.

10103 Nikonos Speedlight SB-103	275.00 *
10104 Nikonos SB-103 head only w/diffuser and TTL sync cord	189.00 *

Nikonos Speedlight Accessories

10729 PC flash adapter (on land) for Nik. IV, V ..	19.50
10204 Db1. TTL sync cord for SB-102, 103	85.00
10201 Db1. bracket set for SB-102/103	194.00
10203 Ext. arm set for SB-102/103	85.00
10711 O-ring set w/silicone for SB-103	5.40
10712 O-ring set w/silicone for SB-102	5.40
10200 Protector for SB-102	42.50
Sunpak Marine 32	209.00
Oceanic 2000 (specify Nik. I, III, IV, V) ..	126.50
Oceanic 2000 slave w/handle	126.50
Oceanic 2001 with ED	315.00
Oceanic 3000 TTL w/cord	510.00
Oceanic 3002 with auto & Nik. III, IV, V cord ..	578.00
Oceanic ED slave adapter (req. optional cord) ...	412.00
Oceanic ED slave adapter	89.00
Popular Aqua F-III w/arm & tray	149.50
Popular Aqua F-III TTL w/arm, tray & diffuser ..	209.50

Package Special

Nikonos V w/35mm f2.5, Popular Aqua F-III TTL strobe, arm, tray, diffuser, equipment case with foam, and book

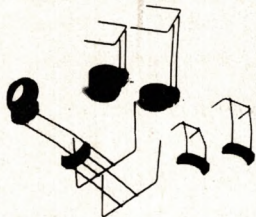
.....	599.00
-------	--------

Sea & Sea YS-20 for Nik. I, II	89.00
Sea & Sea YS-20 with Sealoc	89.00
Sea & Sea YS-150 w/slave for Nik. II	299.00
Sea & Sea YS-150 w/slave for Nik. III, IV, V ..	299.00
100 Subsea Mark 100 strobe, ED	329.00
103 Subsea Mark 100 strobe for Nik. III/IV/V ..	315.00
104 Subsea Mark 100RG rechargeable strobe with charger, ED	345.00
106 Subsea Mark 100RG rechargeable strobe with charger for Nik. III, IV, V ..	335.00
147 Subsea Mark 150 strobe, ED	459.00
149 Subsea Mark 150 strobe for Nik. III/IV/V ..	449.00
144 Subsea Mark 150RG rechargeable strobe with charger, ED	459.00
146 Subsea Mark 150RG rechargeable strobe with charger for Nik. III, IV, V ..	449.00

Subsea Mounting Accessories

351 Flexible arm	76.00
151 Universal arm, 17"	60.00
151B Universal arm, blue	72.00
051 Standard arm, 12"	52.00
061 Universal Nik. I, III, IV tray	22.25
172 Double Nikonos II/III tray	31.50
176 Ikelite housing mounting bracket	17.00

Helix Extension Tube Set



Helix Extension Tubes. With just three tubes and seven frames, Helix extension tubes form the most versatile close-up system available. Constructed of black anodized aluminum, each extension tube easily attaches between your Nikons camera and lens.

HLP-230 NEW Helix basic set for 28mm w/2 tubes and 3 frames (1:1, 1:8, 1:2.75)	75.00
HLP-122 Helix basic set for 35mm w/2 tubes and 3 frames (1:1, 1:2, 2:1)	75.00
HLP-123 Helix deluxe set for 35mm w/3 tubes and 4 frames (2:1, 1:1, 1:2, 1:3)	105.00
HLP-124 Helix master set w/3 tubes and 6 frames for 28mm (1:1.8, 1:2.75) and 35mm (1:1, 1:2, 2:1, 1:3)	139.00

Subsea Accessories

493 Battery f/Mark 100	24.00
497 Battery f/Mark 150	31.95

Hanimex

Hanimex 110 Arphibian	89.50
Hanimex 110 and slave strobe package	185.00
Hanimex Macro Lens and Wand 110	35.00
Hanimex close-up lens 110	26.75
O-ring (replacement)	3.95
Hanimex 35 Arphibian	157.50

SPECIAL

Helix-Hanimex 35 package. Includes 35 Arphibian camera, 9x14x5" equipment case and Hanimex slave strobe with am.	269.50
Hanimex Slave Strobe (specify 110or 35)	98.00
Hanimex Filter Adapter Ring	5.95

CLOSE-UP SPECIAL

Hanimex Penguin housing for Kodak disc 4000 (rated to 12 feet)	12.00
--	-------

Hanimex 35 Accessories

Carrying case	15.00
O-ring (replacement)	3.95
Nelson female bulkhead	21.50
Wide angle lens adapter, NEW	89.50
Hanimex Macro lens and wand 35	44.00

110 Disc Cameras and Accessories

Ikelite/Vivitar package with Vivitar 845, 110 housing, close-up lens and sportsfinder	103.95
Ikelite/Kodak package w/Kodak 3100, disc housing, 2 rolls of disc film and battery	85.95
Ikelite housing for Kodak disc 2000, 3000, 3100, 3500, 4000	47.95

Housing and Accessories

Aquatica 3N Professional Aluminum housing for Nikon F3 with DA-2 and motor. Includes dome port, EO bulkhead and internal light

1495.00

Ewa U-FXP housing for 35mm SLR w/winder, strobe or zoom lens, 9x6x7-1/2"	78.00
Ewa U-FXM hsg. for Canon A-1 w/motor, or Nikon FM, FE w/motor 6-1/2x5-1/2x7"	87.00
Ewa U-H housing for Hasselblad, Bronica	104.00
Ewa U-AL housing for disc camera	19.95
Hugyfot UFORMARIN aluminum housing for Olympus OM-1, 2, w/ED or Nik. III/IV connector	339.00
Hugyfot UFORMARIN housing for Nikon EM, FG	339.00
Hugyfot Professional 38 aluminum housing for Nikon F3 with DA-2 finder and motor (port. opt.)	1325.00
Ikelite 6520 housing for Nikon F and FTN	199.00
Ikelite Super-Eye housing for Canon A-1, AL-1, AE-1 Program	279.95
Ikelite Super-Eye housing for popular brands of SLR cameras	279.95
Ikelite hsg. for SLR cameras w/action finder	239.00
Sea & Sea aluminum hsg. for Nikon F2	695.00

Light Meters and Housings

Ikelite housing for Gossen Super Pilot	39.95
Sea & Sea light meter	69.00
Sekonic L-164B Marine Meter II	84.50
Sekonic L-158 WH meter w/housing	41.00
Sekonic L-188 WH meter w/housing	54.00

Equipment Cases and Boxes

Aquacraft Goody Box, 3x5-1/2x8-1/2"	6.95
Helix Accessory Tote, 9x4x5"	4.95
Helix Equipment Case, 18x13x8"	39.95

Helix Aquafash 28 with Nikons V



HLP-311 Helix 1:1 tube and framer for 35mm ..	29.50
HLP-312 Helix 1:2 tube and framer for 35mm ..	29.50
HLP-313 Helix 1:3 tube and framer for 35mm ..	29.50
HLP-212 Helix 1:1.8 tube and framer 28mm	29.50
HLP-213 Helix 1:2.75 tube and framer for 28mm ..	29.50
HLP-NIK Up-Grade Kit for Nikons, Helix or Subsea Basic Set to Master Set	75.00
Helix Underwater Products	
HLP-EDII Helix 6" ED to Nikons II/III	52.00
HLP-EDIII Helix 6" ED to Nik. III/IV/V	52.00
HED-EXT 10 ft. male/female ED	95.00
HED-EXT 20 ft. male/female ED	99.00
Helix Audible Water Detector Kit	29.95
Helix Audible Water Detector Kit w/LED	39.95

Pelican equipment case, black,

17-1/2x11-7/8x6-1/2"	74.50
King Pelican case, black or gray, 22x17x8" ..	119.00
Pelican box with foam	14.40
Subsea Equipment case, 18x13x12"	178.00
Subsea Equipment case, 18x13x8"	159.00

Dive Lights

(non-rechargeable, batteries not included)

Helix HLP-200 Photo/dive light (req. 2 "D") ..	14.95
Helix HLP-205 Mini dive light (req. 2 "AA") ..	9.75
Helix high intensity conversion kit for HLP-200 w/Krypton lamp	4.95
Ikelite Mini-C lite (req. 4 "C")	17.50
Ikelite Mini-C halogen lite (req. 4 "C")	22.50
Ikelite Mini-C Mark Strobe beacon	44.00
Ikelite Modular Super Lite, clear or black case (requires charger)	179.00
Ikelite Modular handle on pistol grip	7.95
Pelilite with krypton lamp	14.95
Toshiba K-133 with spare halogen (req. 4 "D") ..	27.95
Toshiba K-132 with spare krypton (req. 4 "D") ..	21.95
UM Kinetics Super-G with charger	43.00
UM Kinetics QXL-3R with charger	48.00
UM Kinetics QXL-3 light (req. 3 "C")	18.00

Miscellaneous Accessories

Helix Audible water detector kit	29.95
Helix Audible water detector kit w/LED	39.95
AquaCraft camera safety line, 18 ft.	12.95
AquaCraft camera lanyard	5.50
AquaCraft large mesh tote bag	16.75
Beall reel with 100 ft. line	13.75
Beall Nik. III thumb release	8.95
Beall wrist lanyard	4.95
Beall slate with pencil	8.10

Movie and Video

Eumig Nautica 5-8, 18fps	189.00
Ewa U-VB housing for Sony or Sanyo Beta Movie ..	159.00
Ewa U-JC hsg. for JVC or Zenith Video Movie ..	159.00
Helix Nautica double light mount	39.95
Fujica P2 with housing, 18 fps	99.00

Ikelite/JVC package with 2-piece housing, GX-NBU Lo-Lux camera, HR-C3U compact recorder, nicad and charger (Note: Sound may be recorded underwater while camera is in housing)

1995.00

Ikelite modular 100W movie lite-req. charger ..	187.00
Ikelite spare modular nicad	119.00
Ikelite hsg. for JVC TM-P3U 3" monitor	240.00
Ikelite hsg. for JVC GR-C1U video movie	515.00
Ikelite/JVC pkg. with housing, JVC video movie, nicad and charger	1765.00
Pare wide angle lens adapter modified for Ikelite housing	160.00
Sea & Sea CL-80 80W light w/charger	260.80
Subatec Model 180 (100W/54 minutes)	425.00
Subatec Model 500 Twin Hb. (2 at 100W/110min) ..	995.00

Fuji/Helix Introductory Package

Includes Fuji P-2 movie camera, housing, 4X Fuji-chrome R25 film, processing, Beta or VHS tape and up to 200 feet of film to video transfer

149.00

Sea & Sea

PC-1 Pocket Marine 110	99.50
Sea & Sea/Hanimex Pkg. with 110 camera and slave strobe	197.50
CU-1 Macro lens (5") f/PC1 with wand	31.50
CU-2 Close-Up lens for PC-1	26.75
FB-1 Female Sealock bulkhead for PC-1	21.50
O-ring for PC-1 (rep.)	2.98
PC-35/Motor marine, 35mm w/meter	169.50
Sea & Sea pkg. f/PC35M & slave strobe	267.50
WL-24 Wide lens adapter	112.50

Helix Aquafash 28

The Aquafash 28 functions in both automatic and manual exposure modes down to 165 feet. The all-weather flash, designed for the Nikons III, IV or V, is also equipped with a mounting tray, arm and coiled interchangeable sync cord. Uses 6 "AA" size alkaline or Nicad batteries. A 2-year limited warranty is included.

Helix Aquafash 28 (specify Nik. I/II/III/IV/V) ..	329.00
Helix Aquafash 28 TTL	399.00
Helix Aquafash 28 (specify ED or ICS)	339.00

Helix Aquafash Accessories

HLP-CC Repl. outer battery cap	5.95
HLP-HIC Repl. inner battery cap	5.95
HLP-SP Repl. sync plug	4.95
HLP-HMB Repl. camera mount bolt	5.95
HLP-CT Repl. camera tray	49.95
HLP-HMA Mount arm, 18" (repl.)	9.95
HLP-HSA Short arm, 8"	9.95
HLP-HLM Light mount	10.50
HRC Repl. cord (specify Nik. I/II/III/IV/V) ..	39.95
HRC-ED Repl. cord (ED or ICS)	59.95
HCK-22 O-ring kit f/Aquafash 22 or 28	4.95
HLP-WAA 15mm WA adapter	27.95

CU-3 Close-up lens	21.50
CU-4 Macro lens w/wand	40.50
O-ring f/PC-35 (rep)	2.98

SPECIAL- The Underwater Photographer's Handbook by

Peter Rowlands	12.95
Beginning Underwater Photography	6.50
Choosing and Using Underwater Strobes	7.95
Howard Hall's Successful U/W Photography	14.95
Mastering Underwater Photography	9.95
The Nikons System	9.95

Dive Locations

Guide to Bonaire Marine Park	14.95
Bahamas Diver's Guide	19.95
California Dive Boat Guide and Diver's Log ..	4.95
The Diver's Guide to the Philippines	11.95
Diver's Guide to Underwater America	14.95
Diving and Snorkeling Guide to Florida Keys ..	8.95
Diving & Snorkeling Guide to Hawaiian Islands ..	8.95
Diving & Snorkeling Guide to Virgin Islands ..	8.95
Diving & Snorkeling Guide to Grand Cayman ...	8.95
Diving & Snorkeling Guide to Cozumel	8.95
Diving and Snorkeling Guide to Bonaire, Aruba and Curacao	8.95
Diving Guide to Bahamas	8.95
Guide to Curacao Underwater Park	3.95

General Interest

Advanced First Aid Afloat	6.00
Caribbean Seashells	6.95
Compendium of Seashells	50.00
Complete Guide to Underwater Modeling	9.95
Dangerous Marine Animals	15.00
The Decompression Workbook	5.95

Samantha by David Pilosof. The first book ever devoted to capturing the nude female form in an underwater setting. Softbound.

Samantha

19.95

Scuba Diving Safety	5.95
Scuba Equipment Care & Maintenance	9.95
Sharks and Rays	7.25
Shipwrecks of Truk	14.95
They Found Treasure	10.00
Touch the Sea	12.95
The Undersea Predators	24.95

Telescopes & Binoculars

Bausch & Lomb 4000 Telephoto (1200mm f12) ...	309.00
Bausch & Lomb spotting scope w/porro prism ..	359.00
Bausch & Lomb Observatory w/clock drive	549.00
Helicon 2" Refractor telescope w/wood tripod ..	125.00
Helicon 4-1/2" Reflector telescope w/wood tripod ..	249.00
Helicon 8x30 Roof Prism	79.00
Helicon 8x40 Roof Prism, armored	89.00
Helicon 11x80 w/case	145.00
Helicon 20x80 w/case	160.00
Helicon 30x80 w/case	170.00
Nikon 7x20 CF w/case	69.00
Nikon 9x25 CF w/case	79.00
Halley's Comet Finder	5.95

Close-Up Special

	Was	Now
King 12x50 w/case	59.00	35.00
King 16x50 w/case	69.00	39.00
King 20x50 w/case	89.00	49.00
Limited Quantities		

ONCE IN A LIFETIME

Plan your first encounter with Halley's Comet and take advantage of your southern location in the Bahamas or Caribbean during early January or late February-March 1986. It will only take a good pair of binoculars.

HELIX

Underwater orders and information: 800-33/HELIX

325 West Huron St., Chicago, IL 60610 / (312) 944-4400

Helix Worldwide Telex #701713 answer back: HELIX CGO UD
Quantities limited./PRICES SUBJECT TO CHANGE
Shipping or insurance charges not included.

Helix Photo Dive Trips!
Bonaire - Jan 26 - Feb. 2, 1986

Philippines - Mar. 23-Apr. 8, 1986

NEVER UNDERSOLD

Divers Supply



\$295⁵⁰

SPECIAL Christmas Package

- **Techni Pro Regulator**
Lifetime Warranty
- **Sea Elite Jacket**
'86 Model, backpack,
auto inflator, CO₂
Detonators
- **Dacor Console-ICM 150**, max. depth
- **Free Shipping** in the continental USA



Just one of many incredibly
low-priced packages



CALL FOR DETAILS!



**Lowest Prices, Name Brands,
Fast Service and Free Shipping...**

- SAME LOW PRICES IN STORE •

OPEN 7 DAYS A WEEK

CALL OR VISIT....

Information Express Line

1-912-474-6790

Toll Free Order Line

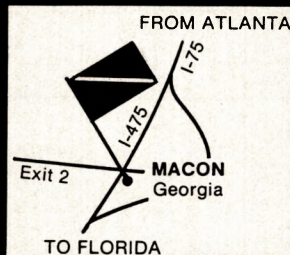
(out of state only)

1-800-241-4739

ASK FOR OUR

FREE CATALOG!

LOCATED
ON INTERSTATE
(at Exit #2 on I-475)



**5208 Mercer University Drive
Macon, Georgia 31210**



Life support equipment should not be used or operated unless you have taken qualified instruction and certification. This ad does not constitute an offer to sell via mail order. circle #232 on Reader Service Card

TITANIC

(Continued from Page 53)

expected to be operational by 1988. It will complement Argo, which will remain stationary over the bottom at about 100 feet while Jason collects close-up stereo color images and bottom samples.

Like seductive sirens that lure sailors to rocky shores, the controversial *Titanic* continues to lure adventurers and scientists to her final resting place. There are pressures to leave the wreck alone and pressures to retrieve some relics from the golden age of ships. There are questions



Wine bottles are also found strewn about the wreck, relics of a bygone era.

too: Who owns the vessel? Who has the rights to it? Who really found it first? Could modern technology raise the *Titanic*? Will H.R. 3272, a bill introduced in Congress designating the *Titanic* a marine memorial, be passed? Again, now that we've found the ship, what'll we do with it?

There is an old Buddhist saying: "To every man is given the key to the gates of Heaven... but the same key opens the gates of Hell." *Titanic* explorers and salvors will be damned if they do and damned if they don't. What do you think? Should we let the unlucky lady be or should we "Raise the *Titanic*!?"

NAUI UPDATE

NAUI has established a new southeast regional office in Florida. Ed Kasten has been appointed Southeast coast and Caribbean field service representative.

A NAUI instructor, Kasten's responsibilities will be to service and provide in-store consulting from NAUI Pro Facilities and resorts in Florida, Georgia, Alabama, South Carolina and the Caribbean.

Instructor John Heine has been named manager of the Mid-Pacific Branch, Region 3. This branch handles NAUI activities in California counties north of San Luis Obispo, Kern and San Bernardino, plus the states of Nevada and Utah.

Harry Ellis, NAUI's West Pacific Branch manager since early 1980, has been appointed NAUI regional field service representative. His region includes the geographical areas of the West Pacific Branch, which encompasses all the major countries, U.S. Trust territories and islands of the West Pacific, with the exceptions of Australia and Japan.

DELUXE PACKAGE:

★Free Gear Bag with purchase of Deluxe Package!★

- AA. New Advance Design Jacket BC with Inflator & Backpack . . . 225.00
- BB. Top-of-the-Line Regulator . . . 165.00
- CC. Octopus . . . 69.95
- DD. Pressure, Max. Depth & Compass Combo Gauge . . . 99.95
- EE. 80 Cubic Foot Tank with K-Valve . . . 117.00
- FF. Tank Boot . . . 4.95

Regular Total Price: 681.85

Deluxe Package Price . . . 655.00

OPENWATER PACKAGE:

- GG. Jacket Style BC with Inflator & Backpack . . . 129.95
- HH. Most Popular Balanced Diaphragm Regulator . . . 109.95
- II. Pressure Depth Gauge Combo . . . 69.95
- EE. 80 Cubic Foot Tank w/K-Valve . . . 117.00
- FF. Tank Boot . . . 4.95

Regular Total Price: 431.80

Open Water Package Price . . . 405.00

Regulators & Gauges:

- A. Most Popular Mid-range Regulator \$134.95
- B. Pressure Gauge . . . 39.00
- C. Pressure, Max. Depth Combo Gauge (not shown) . . . 74.95
- D. Advanced Triple Combo Gauge with Bottom Timer (not shown) 165.00
- E. Pro Compass . . . 19.00

Wetsuits and Accessories:

- F. New Plush Lined Step-in Jacket and Farmer John Suit . . . 225.00
- G. Plush Lined Thermoflex Farmer John and Jacket Suit . . . 199.00
- H. Thermoflex Farmer John and Jacket Suit . . . 159.95
- I. Cold Water Hood . . . 24.50
- J. Molded Sole Boot . . . 24.50
- K. Three-Finger 1/4" Mitts . . . 23.50
- L. Five-Finger Gloves . . . 14.95

DELUXE SNORKELING PACKAGE:

- JJ. Most Popular Silicone Mask . . . 45.00
- KK. Silicone Turboflex Snorkel . . . 12.00
- LL. Clear Thermoplastic Full Foot Fins . . . 24.50

Regular Total Price: 81.50

Deluxe Snorkeling Package . . . 72.50

SCUBA STARTER PACKAGE:

- MM. Pacifica Mask . . . 26.50
- NN. Contoured Snorkel . . . 8.50
- OO. Rocket Style Fins . . . 24.50

Regular Total Price: 59.50

Scuba Starter Package . . . 54.50

New England Divers SUPER HOLIDAY GIFTS Toll Free 1-800-343-8122



Masks, Fins, Snorkels:

- M. Vented Thermoplastic Open Heel Fins . . . 35.00
- N. Silicone Wraparound Mask . . . 49.95
- O. U.S. Divers Atlantis Silicone Mask . . . 39.95
- P. Most Popular Low Volume Mask . . . 28.00
- Q. Vented Silicone Snorkel . . . 16.50

Accessories:

- R. UK600 Non-Rechargeable Light with Interchangeable Grips . . . 34.50

- S. UK600 Rechargeable Light . . . 65.00
- T. Super QXL-3 Non-Rechargeable Light . . . 22.95
- U. New England Divers Large Equipment Bag . . . 35.00
- V. New England Divers T-Shirt . . . 7.95
- W. Float and Flag . . . 15.95
- X. Weight Belt & Buckle . . . 5.25
- Y. USD Nordic Knife . . . 14.95
- Z. USD Master Knife . . . 19.50

Mass. Residents add 5% tax
Calif. Residents add 6% tax

Fla. Residents add 5% tax
Wash. Residents add 7% tax

Underwater Life Support Systems are potentially dangerous to a non-trained user. These include scuba tanks, regulators and buoyancy compensators. This does not constitute an offer to sell these items via mail order.

NATION-WIDE RENTAL EQUIPMENT SALE! Tanks, Regulators, Gauges, Suits, BC's BELOW OUR COST!!! Contact Your Local Store For Details

EAST COAST

Beverly, Massachusetts
131 Rantoul St.
Beverly, MA 01915
(617) 922-6951

Kendall, Florida
9820 Dixie Hwy
Kendall, FL 33156
(305) 667-4622

★**New Store Miami, Florida**
6043 N.W. 167th Street
Miami, FL 33015
(305) 825-7722

Long Beach, California
4148 Viking Way
Long Beach, CA 90808
(213) 421-8939
(714) 827-5110

Los Angeles, California
11830 W Pico Blvd
W. Los Angeles, CA 90064
(213) 477-5021

WEST COAST

San Diego, California
3860 Rosecrans Street
San Diego, CA 92110
(619) 298-0531

San Francisco, California
398 Fifth Street
San Francisco, CA 94107
(415) 434-3614

Kent, Washington
24860 Pacific Highway So
Kent, WA 98032
(206) 246-3337

SUN. 9:30-6
PHONE ORDERS ACCEPTED DAY OR NIGHT
MON.-THURS. TILL 9:30 PM EDT FRI. 9-2.

AD
THE PHOTOGRAPHY PEOPLE
138 WEST 34TH STREET
NEW YORK, N.Y. 10001

RAMA
212/564-4465

TOLL FREE OUT OF STATE
800-223-2500
HAWAII & ALASKA
800-232-7662

Nikon UNDER WATER SYSTEM

**New Nikonos V	278.95
15/2.8 w/finder	849.95
28/3.5 UW	177.95
28/2.8 LW (Dry)	124.95
35/2.5 UW	82.95
80/4 UW	161.95
SB 102 W/C	529.95
SB 103 W/C	267.95
Close up off. wbc.	114.95
Lens Hood & Fltr. Hldr.	4.95
Orig. Nikonos Case	27.95

Acc. F/Nikonos

Sunpak Marine 32	199.95
Sekonic L164B	78.95
Toshiba Aqua Fill	174.95
Toshiba Aqua TTL	249.95

*Free Nikonos Ext. Tube set and \$100 travel cert. Avail. Call For Details

Minolta Weathermatic-A 57.95

PELICAN
CASES
Water Proof, Unbreakable
#1400 48.95
#1500 67.95
#1600 118.95
#1700 139.95

UNDER WATER Acc.

Hanimex Amphibian 110	88.95
Hanimex Amphibian 35mm	143.95
Eumig Nautica Underwater Super 8	249.95
Movie Camera	19.95
Sima Sports Pouch	19.95
Toshiba Under Water Flashlight	39.95
Adorama Marine Meter	77.95

NY residents add sales tax. No surcharge for MasterCard or VISA purchases. Not responsible for typographic errors. Personal Checks welcome, will ship without delay (name must be imprinted on check, also include address, phone & major credit card or copy Drivers License for reference). MasterCard and VISA \$50 minimum or \$2.50 service charge. (We charge at time of order). Allow up to nine weeks delivery. Shipping, handling & ins. extra. Charges are \$5.95 per order + over 3 lbs. \$05 per lb. + 3% of value. Over \$750.00 2% of value. We ship by UPS-Parcel Post or Truck might be extra. All orders are subject to acceptance and verification. Consumer Affairs License #800188. 14 day satisfaction or money back guarantee (less shipping), must be in mint condition with its original packaging and blank warranty card. Orders returned after 30 days or refused outright on 8% restocking charge will be deducted. Adoramas merchandise are parallel imports which are covered by Adoramas exclusive limited warranty. Unless mfg. or dist. warranty included. (Copy can be obtained free by written request to Adorama). Pictures are for illustration purposes only may not be exact. Adorama will strive to honor Adv't., price until new issue appears. Prices effective until December 3, '85 and may be subject to supplier's price increases.

ikelite underwater systems

SLR CASES	
F/Most Cameras w/Super Eye	279.95
F/Most Cameras W.O./Super	239.95
Eye	319.95
F/ISCR W/Motor Dr (MD-36) w/Super	Call
Extension Ports F/Tele Lenses	Call
FLASH UNITS	
Substrobe M. (Req Sync Cord)	94.95
Substrobe MS	119.95
Substrobe 75 w/NC & CHARGER	264.95
Substrobe 150 w/NC	349.95
Substrobe 225 w/NC	399.95
Strobe ARM I	28.95
Strobe Handle & Mount I	37.95
Strobe Quick Handle	59.95
Strobe Housing F/Most Flashes	89.95

NEW U.W. RIMOWA CASES

Rimowa Reporter Case #468	
L13.8 W 7.5 H 9.0	139.95
Rimowa Tropicana Case #372	
L18.0 W 13.8 H 6.9	189.95
Rimowa Jeep Case #171	199.95
L14.2 W 11.8 H 6.0	

All other sizes in stock call for more info.

ZEISS BINOCULARS

8x30 B CFT*	GA w/Pouch	349.95
8x56 B CFT*	GA w/Case	489.95
10x40 B CFT*	GA w/Pouch	409.95
15x60 CFT*	GA	696.95

KODAK SLIDE FILM

	w/o Kodak proc.	proc.
KM 135-36	4.29	6.59
PKM 135-36	5.25	8.17
KR 135-24	2.49	4.44
KR 135-36	4.09	6.59
PKR 135-36	5.25	8.10
EN 135-36	3.89	6.74
ED 135-36	4.89	7.74
ET 135-36	4.70	7.55
EL 135-36	5.79	8.64
EL 120	3.76	
EPD 120	3.65	
EPR/EPY 120	2.85	
EPN 120	3.22	
EPD 135-36	6.40	9.25
EPT 135-36	6.50	9.35
EPR 135-36	5.40	8.25
EPY 135-36	5.40	8.25
EES 1600	7.59	

Fujichrome
Slide Film w/P
RF 135-36 (50) 5.95
RD 135-36 (100) 5.95
RH 135-36 (400) 7.59

U.W. marine Master Series

U-F Camera and Winder	61.95
U-FX Camera, strobe & winder (or motor)	68.95
U-FPN Camera w/large motor & Lens (72 mm)	72.95
U-FGM Camera w/Tall Strobe	71.95
U-FZ Camera w/Zoom & winder	71.95
U-AFM f/auto focus cameras	35.95
Watersound Housing for Walkmans	32.95
Raincapes F/SLR	9.45
Housing f/video cameras	139.95

UNDERWATER CAVE RESCUE

24th Cave Diving Workshop
Tests New Equipment
And Techniques

BY C. RANDALL BOHRER

Branford, Florida, near Gainesville, offers what is considered to be the best freshwater diving in the world. Springs in the area discharge the clearest, purest water in the country. There are artifacts to find, caverns to explore and, with no waves or surf, the diving conditions are what every diver dreams of. We had come here to enjoy the diving, but we were part of a group of more than 150 cavers and cave divers who traveled from as far as Canada and France to attend the 24th cave diving workshop. Our purpose, specifically, was to meet with some of the foremost divers in the field to develop techniques for rescuing cavers and cave divers from flooded caves.

The National Speleological Society (NSS) was founded in 1941 to promote the systematic exploration and conservation of caves. The Cave Diving Section, a suborganization of the NSS, was formed

Sea Ray WET SUITS
289D Suburban Avenue
Deer Park, NY 11729
WRITE FOR FREE COLOR BROCHURE

ORDER DIRECT from manufacturer
SAVE \$
CALL TOLL FREE
800-645-5554
New York Residents Call
516-667-7249

Same Day Shipment • Satisfaction Guaranteed
Hours M-F 9am - 6:30 pm; Sat. 9am - 3pm
Eastern Standard Time

DRY SUIT 1/4" N-2
Navy w/Royal Blue Arms
With Dry Valves **360.** (as shown)
With Oral Inflator **299.00**

NEW SUPERFLEX MATERIAL!

FARMER JOHN DELUXE 1/4" N-2 Navy w/Blue Arms **154.95**
WOMAN's FARMER JOHN 1/4" N-2 Navy & Silver Lycra **134.95**
FARMER JOHN 1/8" N-2 Navy w/Blue Arms **124.95**

1/4" N-2 Cold Water Hood **19.95**
1/4" N-2 3 Finger Mitts **19.00**
5 Finger Gloves **19.95**

FARMER JOHN REGULAR - 1/4" Nylon-2, Navy with Blue Arms & Collar **129.95**
HIGHWAISTED - 1/4" Nylon-2, Jacket & Pants Navy w/ Blue Arms & Collar **120.00**
SHORTY 1/4" Nylon-2, Blue with Black Trim, short sleeves **65.00**
VEST AND HOOD - 1/4" Nylon-1, Blue **34.95**
VEST WITHOUT HOOD - 1/4" Nylon-1, Blue **27.95**

• All Suits & Accessories Triple Glued • Sewn • Bartacked • Dealer Inquiries Invited •

SHIPPING by UPS
Suits - 5.00 ea.
Accessories 2.50 ea
Accessories ordered with suit 1.00 ea



Dr. John Zumrich provided expertise.

in 1973 to cater to the needs of the cave diving community. Since that time, the NSSCDS has sponsored a workshop twice a year. The workshop includes lectures and films on subjects ranging from dry caving to diving physiology, as well as organized dives. The latest equipment also makes its way to the workshop, including diver propulsion vehicles and super powerful underwater lights. The day wraps up with the semi-annual business meeting, where section policy is made, money is allocated and officers and committee chairmen are selected.

This season, the two days following the workshop were set aside for the International Sump Diving Rescue Seminar. The need for this meeting is obvious when one considers a typical scenario: A group

photos/R. Bohrer

of non-divers enters a cave for an all-day exploration and sightseeing trip. However, some portions of the cave are partially filled with water, with only a small airspace allowing passage. During the trip local rains cause the water in the cave to rise to a level more than sufficient to block the return route. With no dry exit, the cavers are forced to wait until the water level drops naturally or is artificially lowered by rescuers on the outside.

This incident occurred in Kentucky during April 1983. Eight cavers were trapped for three days while cave divers brought in food and supplies and pumps strained to remove the water. On the third day, the trapped cavers were quickly escorted from the cave via a three inch airspace. When the pumps were removed shortly after the successful rescue, the water level again rose and completely closed the airspace in less than 15 minutes.

More reasons for the development of these rescue techniques began to surface during a recent expedition to the caves of Huautla, Mexico. A team of 12 cavers from the U.S., England and Mexico spent three months in the jungles of southern Mexico and as long as nine days underground attempting to set a new world record for the deepest, or highest vertical relief, cave system. The explorers, all proficient cave divers, passed six water-filled passages, called sumps, using new diving equipment and techniques developed specifically for this project. With several miles of cave behind them, almost a mile of it underwater, along with several vertical drops of hundreds of feet, the expedition leaders realized that a seemingly minor injury, such as a simple fracture, might result in the victim's death.

Until these problems were recognized, the standard procedure in U.S. caving circles was to ferry supplies to the trapped cavers until the water level subsided. The reasoning behind this "no rescue" policy was the fear that non-divers might panic and not only kill themselves, but the rescue diver as well. A "crash" cave diving course could not sufficiently guarantee a safe rescue. Also, it is possible to support personnel in U.S. caves for one to two weeks at a time since underground temperatures in popular caving areas are no colder than 50-60° F.

Several "what ifs" now dispute the previous reasoning. What if the water level does not subside? The cave in Kentucky mentioned earlier has been known to "sump" closed for months at a time. It may not be possible to support the victims or the rescue personnel for such an extended period. What if a cave diver is injured on the far side of a long sump and needs medical attention? These situations would require that the victim be somehow equipped with diving gear and extricated from the cave by a diver.

Sunday morning, therefore, saw the meeting of the United States' top cave divers. Several members of the Huautla

Phone Central Last!

CENTRAL SKINDIVERS is a full time, full line pro shop with an olympic size indoor pool. **CENTRAL** has been in business 34 years and our sales and service departments are familiar with every Scuba diving item made. We are not a warehouse or discount operation.

How do you like this month's special? This is just an example of **CENTRAL'S** low, low prices. **WE GUARANTEE TO BEAT ANY ADVERTISED PRICE IN THIS MAGAZINE.** Just ask for Peter, Bobby, Rich, Dan or Archie.

Check around and when you've decided what you want, **CALL CENTRAL LAST.** We'll beat any price and with VISA, AMERICAN EXPRESS, MASTERCARD, or PADICARD we will ship the same day. Call 516-826-8888 any day including Sunday and **CENTRAL** even will pay shipping in continental U.S.A. on most orders.

All items brand new and double guaranteed by manufacturer and **CENTRAL**

OPEN 7 DAYS MON TO FRI 10-9, SAT 10-7, SUN 10-5

PHONE (516) 826-8888

STABILIZING JACKETS

Famous Make

L.P. Inflator & Hose

"Travel" Kam Pack

Adjustable Slides

STAB. JACKET (M or L) \$129

PRO JACKET (M,L,XL) \$189

SUPER DELUXE JACKET (M,L,XL) \$219

NEW A.D.V. STYLE (M or L) \$229

Central pays shipping
B C S AND STAB JACKETS FROM
US DIVERS DACOR SEAQUEST
SEATEC. ETC. ALWAYS ON SALE

THERMO-PLASTIC

Jet Type Blade

Vented Clear Plastic

Adjustable Straps

FIN (S, M, or L) (\$53 list) \$35

TRI-VUE SILICONE MASK (\$50 list) \$32

SILICONE VENT SNORKEL (\$21 list) \$16

NYLON 2-HARD SOLE BOOTS (\$40 list) \$23

NYLON 2-5 FINGER GLOVES (\$35 list) \$21

Central pays shipping

"Central pays shipping"
is for continental
USA only.

WATCHES

SEIKO AUTOMATIC DAY DATE (list \$165) \$129

CHRONOSPORT AUTOMATIC DATE (list \$160) \$125

HEUER QUARTZ DATE (list \$215) \$159

CHRONOSPORT GOLD QUARTZ (list \$435) \$335

HEUER BLACK CORAL II (list \$375) \$289

CHRONOSPORT U. D. T. STRAP (list \$385) \$299

Central pays Shipping

ALL OTHER WATCHES ALWAYS ON SALE.

FAMOUS SUITS NYLON 2 SIDES

1/4" HI WAIST SUPERSTRETCH \$139.50

1/4" FARMER SUPERSTRETCH \$179.50

1/4" FARMER SUPERPLUSH \$199.50

1/8" DELUXE SHORTY \$99.50

CLEARING OUT XS, S, M 1/4" SUITS \$99.50

Central pays shipping

OTHER WET OR DRY SUITS AND
SHORTIES FROM VIKING, PARKWAYS
US DIVERS, HENDERSON, HARVEY.
ETC. ALWAYS ON SALE

All prices are for mail order only
Store prices may vary.



DELUXE SPEAR GUNS

JUNIOR 39" 2 RUBBER (list \$ 80) \$ 59

STANDARD 49" 2 RUBBER (list \$ 90) \$ 67

DELUXE 58" PNEUMATIC (list \$150) \$125

STANDARD 43" PNEUMATIC (list \$145) \$120

JUNIOR 32" PNEUMATIC (list \$140) \$115

BANTAM 18" PNEUMATIC (list \$130) \$110

Central pays shipping



2608 Merrick Road, Bellmore, NY 11710

• (516) 826-8888 • Open 7 days

160-09 Jamaica Ave., Jamaica, NY 11432

Open 6 days

Minutes from Manhattan and Kennedy Airport

Central is a PADI Facility

Lessons For Beginner Through Instructor.

Use and operation of life support equipment should not be undertaken without qualified and proper instructions in their use. This ad does not imply the sale of life support equipment through the mail.



REGULATORS

SUPER DELUXE PISTON (LIST \$270) \$179

SUPER DELUXE DIAPHRAGM (LIST \$260) \$159

CYKLON MAXIMUM (LIST \$220) \$149

BALANCED DIAPHRAGM (LIST \$175) \$119

BALANCED PISTON (LIST \$180) \$ 99

OCTOPUS (LONG HOSE) \$ 45

Central pays shipping
REGULATORS FROM US DIVERS, DACOR,
SHERWOOD SEAQUEST, TEKNA,
OCEANIC, ETC. ALWAYS ON SALE



U.S.A. GAUGES

PRESSURE/DEPTH COMBO \$ 75

SUPER DELUXE COMBO \$110

PRESSURE/DEPTH COMPASS TRIPLE \$ 85

SUPER DELUXE TRIPLE \$129

PRESSURE GAUGE \$ 42

OIL FILLED MAX DEPTH \$ 42

Central pays shipping
PRESSURE AND DEPTH GAUGES FROM
US DIVERS, DACOR, OCEANIC AND
TEKNA ALWAYS ON SALE

CENTRAL guarantees
to beat any advertised price!

CALL 516-826-8888 AND ASK FOR YOUR
OWN CUSTOM PACKAGE DEAL

Use part or all or more than this list

REGULATOR
OCTOPUS
STABILIZING JACKET
GAUGES
TANK
SUIT
KNIFE
LIGHT
WATCH

**CENTRAL
BEATS
ANY
ADVERTISED
PACKAGE
DEAL**

Central pays shipping
except tanks.

BOTTOM TIMER

Luminous

Lifetime Warranty

Altitude Adjustable

BOTTOM TIMER \$52

Central pays shipping

BOTTOM TIMERS AND WATCHES
FROM TEKNA, SEIKO, CHRONOSPORT,
HEUER CASIO AND IKELITE ALWAYS ON SALE



CENTRAL SKINDIVERS

2608 Merrick Rd., Bellmore, N.Y. 11710

Phone: (516) 826-8888

Minimum Mail Order \$50

Minimum VISA or MASTERCARD \$75

Minimum AMEX or PADICARD \$100

Name _____

Address _____

City _____ Apt. _____

State _____ Zip _____

Phone () _____

Please rush attached order! Sorry NO C.O.D.

\$ _____ enclosed (N.Y. add tax) or bill

my charge card

_____ Exp. Date _____

☐ VISA ☐ AMEX ☐ MASTERCARD ☐ PADICARD

Signature _____

DISCOUNT CHRONOS

and hi-tech items

1 YEAR WARRANTY — 30 DAY TRIAL

ON THE RUN guarantees the lowest prices, largest selection, fastest service, 1-year warranty on all watch modules and a 30-day trial. We're North America's largest sportswatch dealer and we'll meet all prices in this magazine!

We give you our full address and our own toll-free order center (not just an answering service).

—FOR FASTEST ACTION—
CARD HOLDERS ORDER TOLL-FREE
800-437-4385

Credit card holders may use toll-free number above or send check or money order plus \$2.50 for each watch. Add an additional \$2.00 for U.P.S. air delivery. North Dakota residents add 4% tax.

On The Run

107 Roberts St., Dept. SK-12
P.O. Box 67, Fargo, ND 58107
Telephone (701) 232-9400

Write for a free one-year subscription to our catalog of timepieces and hi-tech items for better living.

NEW CASIO DW-5200C

7-YEAR "G-SHOCK"

FEATURING—

- Waterproof to 660 feet
- 33-foot shock-proof
- Night light
- 7-year battery life
- Electronic calendar, AM/PM
- 1/100 second stopwatch with repeat every hour
- Splitlap time/time out
- 12/24 hour time
- 12-digit LCD display simultaneous with alarm chronograph, timer or calendar
- Countdown timer
- 3 alarms
- 3/4 oz. polysulfone case and band

(660 FT)



only
\$39.95

NEW CASIO TRU-DUO MARINER ANALOG/DIGITAL DIVER

FEATURING—

- Watertight to 330 feet
- 1/10 second stopwatch with repeat every hour
- Daily alarm/hourly time signal
- Luminous hands/dial
- Digital display with dual time
- Electronic calendar
- 12/24 hour time
- Lightweight tough black polysulfone
- Casio quality

(330 FT)



only
\$39.95

MEN'S 200M ARTECH

FEATURING—

- 660 ft. waterproof
- Swiss ESA movement
- One-way bezel
- Screw-lock crown
- Luminous hands/dial
- Stainless case, calendar
- Quality equal to Heuer and Seiko



\$39.95

CASIO W-760

FEATURING—

- 330 ft. waterproof
- 5-year battery
- 1/100 stopwatch
- 12/24 time, 12 digit LCD
- Countdown timer
- 3 alarms
- Night light, calendar
- Stainless case and band



\$29.95

CASIO MQD-200W

FEATURING—

- 660 ft. waterproof
- Screw-lock crown
- Luminous hands/dial
- Lightweight black case/band
- Calendar
- Casio quality



\$39.95

LADIES' 200M ARTECH

FEATURING—

- 660 ft. waterproof, 3/4 size
- Swiss ESA movement
- One-way bezel
- Screw-lock crown
- Luminous hands/dial
- Stainless case, calendar
- Quality equal to Heuer and Seiko



\$39.95

LORUS LADIES ER011

FEATURING—

- 330 ft. waterproof
- Long-life battery
- 1/100 stopwatch, calendar
- 12/24 hour time
- Daily/hourly alarms
- Manufactured by K. Hattori (makers of Seiko and Pulsar)
- Stainless case and band



\$39.95

CASIO LADIES LQ351CW

FEATURING—

- 330 ft. waterproof
- Timing bezel
- Screw-lock crown
- Luminous hands/dial
- Stainless case
- Casio quality



\$27.95

CASIO DW300

FEATURING—

- 990 ft. waterproof
- 5-year battery
- 1/100 stopwatch
- 12/24 time, 12 digit LCD
- Countdown timer
- 3 alarms
- Night light, calendar
- 3/4 oz. case/band



\$29.95

CASIO W-700

FEATURING—

- 330 ft. waterproof
- 5-year battery
- 1/100 stopwatch
- 12/24 time, 12 digit LCD
- Countdown timer
- 3 alarms
- Night light, calendar
- 3/4 oz. case/band



\$19.95

CASIO TS-1200

FEATURING—

- 330 ft. waterproof
- Reads temp. in F° or C°
- 1/100 sec. stopwatch with repeat every hour
- Temp/daily/hourly alarms
- Calendar, 12/24 hour time
- 8 time zones, night light
- 3/4 oz. case/band



\$29.95

DIVE CRETE

Inclusive price diving holidays in the magical warm waters of Crete. Including

- OPEN WATER DIVES
- NIGHT & WRECK DIVING

- Also Snorkeling with your own motor boat for the day plus the option of other sports including: Water Skiing, Wind Surfing, Sailing, Jet Skiing, Clay Pigeon & Pistol Shooting. For more information and booking forms phone or write to

THE ELOUNDA DIVING HOLIDAY COMPANY LTD.
2 Castle Street, Salisbury, Wiltshire SP1 1BB England ☎ Salisbury (011 44 722) 332220 or 339811

circle # 236 on Reader Service Card

FULL WEEK—KEY LARGO

* Efficiency Cottage * 10 Dives * Car at Miami Airport (free mileage)

* Free use of windsurfers, canoes and sailboats

Dec. thru April

\$382

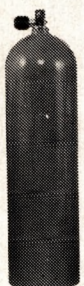
Per Person

Double Occupancy

AMERITRAVEL

Toll free
800-551-4000

circle # 237 on Reader Service Card



80 cu. ft.
Aluminum Tank
with K
\$99.95*



Stabilizing Jacket with
Travel Back Pack Installed
\$124.95



Combo Gauge
5000 PSI/150 Ft.
\$59.95*

*ALL PRICES PLUS SHIPPING
AVAILABLE AT ALL LAGUNA SEA SPORT LOCATIONS
PRICES EFFECTIVE THROUGH DECEMBER 20, 1985

LAGUNA SEA SPORTS
ORDER DESK 714 645-5820
NO COLLECT CALLS OVERSEAS BUYERS TELEX 298847 NAUT UR



Laguna Beach
(714) 494-6965
925 No. Coast Hwy.
Laguna Beach, Ca. 92651

Costa Mesa
(714) 645-5820
2146 Newport Blvd.
Costa Mesa, Ca. 92627

Van Nuys
(213) 787-7066
6959 Van Nuys Blvd.
Van Nuys, Ca. 91405

Riverside
(714) 683-6244
6343 Magnolia Ave.
Riverside, Ca. 92506

Torrance
(213) 373-9364
22767 Hawthorne Blvd.
Torrance, Ca. 90504

Underwater Life Support Systems are potentially dangerous to a non-trained user. These include scuba tanks, regulators and buoyancy compensators. This ad does not constitute an offer to sell these items via mail order.

circle # 238 on Reader Service Card

RESCUE TECHNIQUES

expedition were present, as were some of the rescue divers from the Kentucky incident. Henry Nicholson, the NSSCDS recovery coordinator, and Dr. John Zumrich, of the U.S. Navy Experimental Diving Unit and a key figure in the Huautla expedition, led the effort.

Strange looking equipment littered a picnic table at Ginnie Springs. Dr. Zumrich brought three full facemasks and three underwater communicators. I supplied an O-ring sealed PVC "dry tube" used for transporting food and clothing underwater. Gary Storrick brought a "dry bag," a gear bag-like device affixed with a drysuit zipper and inflation/deflation valves, also used for transporting dry goods. Stretchers and backboards, like those used by fire rescue and ambulance services, were also supplied. Discussion included the use of these devices and methods and resources for constructing new ones. Actual rescue techniques, including the transportation of the victim and protection from cold, were also discussed. Finally, the divers entered the



Henry Nicholson after a practice rescue.

cavern at Ginnie Springs to try out the new equipment and techniques.

Our goals were to test the equipment and its usefulness in cave diving and cave rescue. Divers equipped with full facemasks and underwater communicators towed the dry tube and dry bag from place to place in the cavern while talking to their dive partners underwater. These dry containers were used extensively in the Mexico expedition to transport food and camping equipment into the cave for the explorers. Their application to cave rescue is the same except that here the supplies are to be used by the victims rather than the divers.

The dry containers worked quite well. The rigid tube was easier to handle un-

FAMOUS "SKINDIVER" CUSTOM WET SUITS

NYLON I NYLON II
61⁹⁵/101⁹⁵

Order direct and SAVE!
Satisfaction guaranteed

Men's or women's custom tailored to your measurements with high pants and collar for super warmth. Finest wet suit material, completely nylon lined. Features sewn seams, noncorrosive zipper and twist locks. 1/4" or 3/16" material — mark choice below. Just fill in your measurements and mail your order. Quick delivery with Visa, Mastercard, and M.O. Checks take 3 weeks to clear.

1/4" 3/16"

Sex Age

Height

Weight

___ Ankle

___ Calf

___ Knee

___ Thigh

___ Hips

___ Waist

___ Chest

___ Neck

___ Wrist

___ Forearm

___ Elbow

___ Biceps

___ Ankle to Knee

___ Ankle to Crotch

___ Ankle to Waist

___ Shoulder Seam

___ to Crotch

___ Wrist to Elbow

___ Bra and Cup Size

___ Wrist to Armpit

Hat Size

Include MC - VISA

Exp. Date

☐ GLOVES \$12.95

☐ BOOTS \$12.95

☐ HOOD \$11.95

☐ Add \$3.00 for each Nylon II Accessory

MEN OVER 225 lbs. AND/OR 6'4" ADD \$35.00

WOMEN OVER 175 lbs. AND/OR 5'10" ADD \$35.00

\$6.00 for postage, \$8.50 Canada, \$15 APO, FPO. No COD.

WA State add sales tax. Clip and mail this coupon today.

To: Skin Diver Wet Suits

1632 S. 250th

Kent, Washington 98032-5499

Name

Address

City

State

Zip

circle #239 on Reader Service Card

CHRISTMAS SALE

Prices expire December 31, 1985, or earlier if merchandise is sold

REGULATORS



BALANCED REGULATOR ... **109⁹⁵**

CONSHOLF 20* ... **139⁹⁵**

PRO REGULATOR ... **139⁹⁵**

OCTOPUS ... **59⁹⁵**

Add \$3.50 shipping for each Regulator ordered.

INSTRUMENTS



U.S. DIVERS
DIVEMASTER III
Compass, Oil Filled
Depth & Pressure ... **99⁹⁵**

DELUXE NAVIGATOR
Compass, Oil Filled
Depth & Pressure ... **89⁹⁵**

OCEANIC
Pressure Gauge &
150' Depth Gauge ... **69⁹⁵**

Add \$2.50 shipping for each Instrument ordered

EQUIPMENT BAGS

DELUXE
EQUIPMENT
BAG



Heavy-Duty Waterproof Nylon
with padded handle, two end and one
side expandable pockets.
REG. \$99.95 ... **49⁹⁵**
Plus shipping

FINS & BOOTS

COMPETITION POWER FIN
Open heel vented fin ... **19⁹⁵**

THERMO PLASTIC POWER FIN
Open heel vented fin ... **34⁹⁵**

Add \$3.50 shipping for each pair ordered.

REEF BOOTS Super Stretch Nylon
Molded Sole Guaranteed not to separate.
3/16" or 1/4" — Sizes 5-12 ... **24⁹⁵**
Plus shipping

B C JACKETS

ALL JACKETS
COMPLETE WITH
POWER INFLATOR
AND KAM PACK

ADVANCED DESIGN
JACKET



~~\$350⁰⁰~~ **249⁹⁵**

DELUXE JACKET ... **139⁹⁵**

OCEAN JACKET ... **149⁹⁵**

U.S.D. PROLINE JACKET ... **199⁹⁵**

PROFESSIONAL
JACKET

Featuring Velcor locking
Cummerbund and Rapid Exhaust

199⁹⁵

(Limited Lifetime Warranty)
Add \$4.00 shipping for each Jacket

WET SUITS

PARKWAY
Farmer John and Jacket ... **169⁹⁵**

PLUSH SUIT
Farmer John and Jacket
with Aquavelvet lining ... **189⁹⁵**
Add \$4.00 for each Wet Suit ordered

MASKS & SNORKELS

TRI—VIEW MASK

Wraparound Mask allows clear
peripheral vision. Double
Feather-edged seal.



BLACK RUBBER ... **19⁹⁵**

TRASLUCENT SILICONE w/o purge ... **29⁹⁵**

TRASLUCENT SILICONE w/ optional purge ... **39⁹⁵**

PROFESSIONAL SNORKEL

With swivel mouthpiece
SILICONE ... **10⁹⁵**

SELF-DRAINING SNORKEL

With swivel mouthpiece
SILICONE w/ Blue Tube ... **13⁹⁵**

BLACK RUBBER w/ Black Tube ... **10⁹⁵**
Plus shipping

FREE!



TRI—VIEW MASK (\$19.95 VALUE)

WITH PURCHASE OF ANY BC JACKET OR ANY
REGULATOR AND COMBO GAUGE.

1-800-241-1856

IN GEORGIA CALL (404) 952-3259

Prices apply only to orders placed by mail or telephone and may vary from those in our store.

SPORTS MERCHANDISERS

1696 COBB PARKWAY, SE
P.O. BOX 1262
MARIETTA, GA 30061



ALL MERCHANDISE SHIPPED WITHIN 48 HOURS!

Use and operation of life support equipment should not be undertaken without qualified and proper instructions
in their use. This ad does not imply the sale of life support equipment through the mail.

* U.S. Divers Conshelf 20 is available for in-store purchase only.

circle #240 on Reader Service Card

SKIN DIVER DECEMBER 1985 123



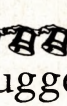
Convenience - Price - Selection

We have what you need for a

BERRY CHRISTMAS

Order direct from Berry Scuba 24 hours a day at 1-800-621-6019 (Outside Illinois only). This is our automated ordering system, and can not answer any questions. It is for orders only, using a Visa, Mastercard, American Express, or Padcard. If you need assistance or have questions, call our Hot Line at 312-763-1626. To order by mail send us your charge card number and expiration date, or certified check, money order, or cashiers check, along with your order to Berry Scuba Co., 6674 N. Northwest Hwy., Chicago, IL 60631. On Compuserve enter "GO BS". Caution: You must be certified in the use of Scuba equipment to dive safely. This ad does not constitute an offer to sell equipment mail order.

 Package D1- Tekna T-2100BX regulator W/light weight 2nd stage and U.S. Tech PSI/Depth double console. Retail \$415.00. Sale \$249.95	 Package D2- Waterlung X3 regulator W/light weight 2nd stage and pressure gauge. Retail \$236.50 Sale \$139.95	 Package D3- Waterlung balanced X2 regulator, Waterlung octopus, U.S. Tech double console, Parkway jacket BCD with power & pack (No CO2), and 80 K aluminum tank. Retail \$880.00 Sale \$512.95	 Package D4- Waterlung X3 regulator, waterlung octopus, pressure gauge, Advanced Buoyancy Vest, and 80 K aluminum tank. Retail \$935.50 Sale \$544.95	 Package D5- "Clear" Contact open heel fins, Silicone mask, Silicone snorkel. Retail \$121.00 Sale \$86.95
--	---	--	--	---

 Seiko SPRO17 Analog Quartz Chronograph with separate min, sec, and 1/100 sec. recorders, tachymeter. Water tested to 300ft. Retail \$225.00 Sale \$179.95	 CHRONOSPORT Champagne U.D.T. gold twin time quartz watch. Multi-function digital, quartz Analog. Timer, dual time, more! Retail \$590.00 Sale \$469.95	 CHRONOSPORT Gold Champagne Atlantis featuring date, unique offset locking crown, sweep second hand, more! Handsomly designed. Retail \$435.00 Sale \$347.95	 CHRONOSPORT NEW MODEL! S.W.A.T. watch features day, date, sweep second hand, nylon strap, locking crown. Black with luminous markings. Retail \$180.00 Sale \$144.00
 HEUER Black Coral II diver's watch, black & gold. Quartz movement, date. Elegant and attractive. Men's or women's model. Retail \$375.00 Sale \$299.95	 HEUER Distinctive design, Quartz, date, stainless steel case, bracelet, fixed bezel with 23 studs. Mens 942.006, Womens 942.008. Retail \$350.00 Sale \$280.00	 HEUER 980.006 Quartz featuring stainless body, tropic strap, date, luminous markings, rotating bezel, and more! Retail \$250.00 Sale \$199.95	 CHRONOSPORT NEW MODEL! Gold polaris watch featuring day, date, sweep second hand, nylon strap, more! Gold and black, luminous markings. Retail \$195.00 Sale \$156.00

Santa's gift suggestions

Gifts under \$50.00		Gifts under \$100.00		Gifts under \$200.00	
Gear bag	22.95	Tekna digital timer	59.95	Hanimex 35 camera	189.95
Ikelite compass	21.95	Double console	69.95	Hanimex accessory strobe	129.95
Spear gun	28.95	Disc camera package	98.50	Cyklon 300 regulator	169.95
Nylon/Lycra body suit	49.95	Rechargeable dive light	69.95	2 CUFT EBS system	139.95
Coral gloves	7.95	X3 regulator	89.95	UK1200R dive light	119.95

The following packages are available **IN STORE ONLY...**

 Package D6- Sherwood Pro BCD W/power & power, Orange octopus, Magnum regulator, aluminum 80 K tank, and Sherwood pressure gauge. Retail over \$950.00 Sale \$495.00	 Package D7- Parkway jacket BCD W/power & pack (No CO2), Atlas regulator, Atlas octopus, U.S.D. double console, and aluminum 80 K tank. Retail \$895.00 Sale \$569.95	 Package D8- Oceanic Freedom BCD W/power & pack, Sherwood Magnum regulator, U.S.D. octopus, 80 K tank, and triple console. Retail over \$1,000.00. Sale \$639.95	 Package D9- U.S.D. Pro line jacket BCD W/power & pack, Conshelf 30 regulator, U.S.D. octopus, Datapro double console W/Max. depth, 80 K tank. Retail over \$1,100.00 Sale \$609.95	 Package D10- Sherwood Pro BCD, U.S.D. Conshelf SE regulator, U.S.D. octopus, U.S.D. Datapro triple console, 80 K tank. Retail over \$1,100.00 Sale \$685.00
---	--	---	--	---

Atlanta and Chicago stores only a few minutes from Airport - All stores open 7 days a week during December for Christmas

Berry Scuba welcomes in Christmas with a **super three day sale** - November 29, 30, Dec. 1. Everything will be at least **40% off retail** - wet suits, Scuba gear, watches, accessories - everything! **Save like never before!** Northwest Hwy. facility in Chicago only. In stock items, while supplies last.

Berry Scuba Company
6674 N. Northwest Hwy.
Chicago, IL 60631
(312) 763-1626

Berry Scuba Company
Yorktown Mall
Lombard, IL 60148
(312) 495-2822

Berry Scuba Company
1717 Rand Road
Palatine, IL 60067
(312) 358-3848

Berry Atlanta
3443 Stawart Ave.
Hapeville, GA 30354
(404) 766-1186

For your free copy of our 40 page Christmas Catalog

circle #241 on Reader Service Card

RESCUE TECHNIQUES

derwater, since its buoyancy doesn't change with depth as did that of the flexible bag. However, the bag is easier to transport through the dry portions of a cave. These factors, along with the particular requirements of the rescue, would determine which is more suitable.

The following day involved in-water practice with a simulated victim. We were to decide upon a rescue technique to be applied to a hypothetical problem. The first problem could be considered the "worst case" situation: An unconscious victim with a possible neck injury is beyond a sump and must be removed from the cave. The victim is first secured to a backboard to immobilize the head and neck. A tank and regulator hang beneath the victim, who is positioned face-up and breathing through a full facemask. The facemask has several advantages. First, it is not possible to lose the air supply since it is securely attached to the face. Next, the mask provides for much easier breathing, even in the face-up position. Also, a U/W communicator can be used with the mask to allow the rescue diver to monitor the victim's breathing or to converse with a conscious victim.

Our volunteer victim was equipped as described, then submerged and carried about the open water portion of the spring. Unfortunately, a problem with the fit of the mask resulted in it flooding and cut the time underwater shorter than planned. This situation made us aware that the fit and seal of the mask must be assured, especially when visibility is limited and the rescue diver cannot maintain total awareness of the status of the mask.

Although this particular scenario was not successfully resolved, the techniques were found to be sound and the problems are easy to look for and overcome in a real situation. Hence, we began the next scenario. This dive was planned to allow the use of alternate techniques as well as to permit the divers to practice with equipment that would be more readily available in an actual rescue situation. The victim was placed in a plastic, roll-up stretcher commonly used by fire/rescue services. The tank was also placed inside the stretcher and the victim breathed from a standard scuba regulator that was adjusted to provide easier breathing in the face-up position. During this dive, we transported our victim through the cavern at the spring, more accurately simulating a real cave rescue. Dr. Noel Sloane was pleased with the results of this dive, stating that it was very easy to carry the victim underwater and at the same time maintain total awareness of the situation.

At the conclusion of the two days, the participants were filled with confidence in their abilities, along with respect for the reality of possible upcoming rescues.

WHERE TO GO



EXPERIENCE BELIZE

with Out Island Divers

Dive expeditions and reef exploratory trips, including the BLUE HOLE, on the REEF ROAMER II. Flexible packages from \$600, all inclusive. Live-aboard or resort-based. Groups welcome!

ENJOY THE VIRGIN ISLANDS

Dive/sail on the CINDERRIFIC. Luxury sailing yacht fully equipped with PADI instructor, excellent cook, dive gear. 4-6 passengers. St. Thomas-based.



Call collect for information and reservations.

BOULDER SCUBA TOURS

(303) 449-8606

1737-15th St., Boulder, CO 80302

DIVE THE TREASURE WRECKS OF ENGLAND'S SCILLY ISLES



H.M.S. ASSOCIATION

"H.M.S. Association" wrecked 1707
"Hollandia" wrecked 1743, "Princess Maria"
wrecked 1688, about 100 known wrecks.

CONTACT: DIVE AWAY, INC.

P.O. Box 6261, Plainfield, NJ 07062-0261
(201) 668-1122



CAP D'ESTREES HAITI

FOR THE VERY SPECIAL DIVER

The newest and most unusual dive operation in Haiti, for only a few privileged divers who appreciate privacy and highly personalized service in an atmosphere where excellence is a way of life.

Contact: **GEORGE KENN**, Restaurant LA LANTERNE
41 rue Borno, Petionville, Haiti Tel. 7-0479

New ideas were also inspired by the practice work in Florida. Undoubtedly, the participants will later be equipped with special drysuits for victims, new dry tubes, dry bags and life support systems tailored to this type of activity. More importantly, however, new techniques, which were only theories in the past, are now "tried and true." Hopefully, these techniques will not have to be used often, but when and if they are used, a rescue can be approached with more organization and less risk than in the past.

Dive **COZUMEL** with the

Galapago Inn (987) 2-06-63
P.O. Box 289, Cozumel, Q. Roo, Mexico
For travel plans, contact:
Sea Safaris

3770 Highland Ave., Manhattan Beach, CA 90266

(800) 821-6670 • In CA (800) 262-6670

SCUBA DIVE RENTALS

BARBADOS HILTON HOTEL Tel: (809) 426-6936

\$ **25.00**

for 24 hours
— complete
equipment set

BARBADOS

LITTLE CAYMAN

Rated by "Undercurrent" as the Caribbean's best diving.

Little Cayman's prestigious resort.

The SOUTHERN CROSS CLUB features:

- complete SCUBA facilities.
- personal service (10 divers maximum).
- private cottages on a blue lagoon.
- complete AP diver's package.
- sailing, windsurfing, bird-watching.
- world-class bonefishing.

For brochure: **SOUTHERN CROSS CLUB**

1005 E. Tower
One Merchants Plaza
Indianapolis, IN 46204
(317) 636-9501

BEQA DIVERS FIJI

At long last day trips to legendary Beqa Lagoon—Cutter, Sulphur, Frigate Passages offer world-class dive sites.

Book now as numbers are limited.

GPO Box 777, Suva, Fiji

Phone: 361-088 or 361-241

Telex: FJ2430 Cables: DIVEFIJI

DIVE W.W. I GERMAN NAVY IN SCAPA FLOW, ORKNEY ISLES OF SCOTLAND



S.M.S. DRESDEN

• 3 battleships, 4 light battle cruisers along with a number of block ships and destroyers, about 30 wrecks total.

CONTACT: DIVE AWAY, INC.

P.O. Box 6261, Plainfield, NJ 07062-0261

(201) 668-1122

SDM SPECIAL SERIES ON REGULATORS



TEXT AND PHOTOGRAPHY BY ERIC HANAUER

"Great taste!" "Less filling!" So goes the dialogue in the popular television commercials extolling the virtues of a certain brewed beverage. In the world of regulators, the dialogue could go something like this:

"More airflow!" "No freeflow!"

These characteristics are the goals of most designers. But regulators with high airflow rates are often temperamental and will freeflow if placed in the wrong position. When a product comes along that delivers all the air needed by a working diver at depth, but is well behaved otherwise, that's news.

These seemingly mutually exclusive characteristics are contained in a regulator just introduced to North America by an Italian company called GSD. The initials stand for the names of the founders, Gatti, Stradella and Daniele. Although not exactly household names in American diving circles, GSD has won respect in Europe with an advanced line of diving and life support equipment. You might remember their earlier regulator, the Spinnaker. It had two second stages and was used by Nick Nolte in the motion picture,

The Deep. GSD is now making a determined bid in the U.S. market with another unconventional regulator, the S-300. What makes it unconventional? Its pilot valve second stage works off only 60 pounds intermediate pressure. It is small and light, with an exhaust deflector that is mounted upside down. The result is easy breathing and high airflow with no free-flow tendency.

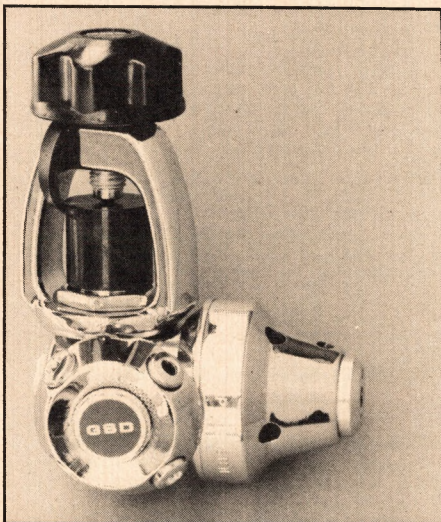
GSD was founded in 1967 in Avegno, Italy, about 25 miles from Genoa. Its initial product was the Smeralda mask, the first to use a molded plastic frame. Most of today's masks are made this way. But sport diving comprises only half the company's business. It makes fire fighting and life support systems under contract to the Italian government and the European Common Market. It also produces commercial diving equipment, including a bandmask that has been tested to 500 meters (more than 1,500 feet). The first stage of the bandmask is exactly the same as that used on the Spinnaker and has been continued without change on the S-300. It is essentially a conventional first stage, operating on the balanced dia-

phragm principle. The most unusual factor is its low intermediate pressure: 60 psi. Most regulators today are set from 120 to 145 psi. The S-300's balanced chamber, pilot valve second stage makes this low pressure operation possible.

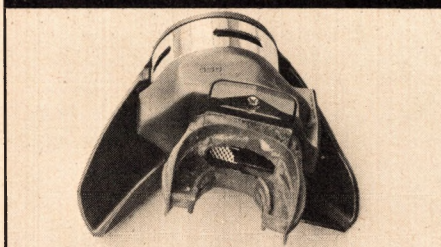
Two additional features set the GSD first stage apart. A spring-loaded pressure relief plug is set to release air if intermediate pressure exceeds 140 psi. If this happens, air will continue to flow to the second stage while the excess is vented. The blowout plug is necessary because the pilot is a tilt valve. Its upstream design prevents it from acting as a safety valve in overpressure situations, as is the case with a downstream second stage.

The second unusual feature is a swivel assembly containing four low pressure ports. Combined with a swivel on both ends of the regulator hose, the diver can easily customize the position of the regulator on the tank. The swivel assembly can be moved to the opposite end of the first stage if desired or a second assembly with four more ports can be added.

The small size of the S-300's second stage is owing to its departure from tradi-



The GSD S-300 first stage (above) features a swivel with four low pressure ports. The second stage (below) has an upside down exhaust tee.



GSD S-300

Total weight50 ounces

First stage:

Type.....Balanced diaphragm

Maximum pressure4,400 psi

MaterialForged brass
chrome plated—stainless steel filter
and balance pin

High pressure portOne

Thread3/8" with adapter

Low pressure ports....Four, on swivel,
(Another swivel, with four
more ports can be added

Thread3/8"

Intermediate pressure.....60 psi

Length of hose.....24"

Swivel connections.....3: yoke, both
ends of hose

Second stage:

Type.....Upstream pilot valve,
balanced chamber

Housing materialNylon 12
reinforced with glass

Bubble deflector.....Black
silicone rubber

DiaphragmGE Tufel silicone

Exhalation360 degrees,
through diaphragm

Price\$300

tional lever design. Instead it has two balanced chambers, activated by the diver's inhalation. As the outer diaphragm bends inward, a light plastic tilt valve opens that creates an imbalance between the chambers. The tilt valve thus acts as a "power switch," decreasing pressure in the intermediate chamber. This causes a second diaphragm to flex, allowing air from the first stage to enter the system. The only moving part is the tilt valve; everything else works in a static manner and is not subject to wear.

In case of a second stage malfunction, a freeflow will occur that will still provide the diver with air. The only factors likely to cause such a problem are foreign matter (such as sand grains) blocking the equalization port in the second diaphragm or excessive wear on the seal of the tilt valve.

The outer diaphragm doubles as an exhaust valve. A conical plastic support allows the middle of the silicone diaphragm to actuate the tilt valve, while the outer edge can unseat for exhalation. In most regulators the exhaust valve is below the intake. Therefore, air must be blown downward and out the exhaust tee for exhalation. By using the diaphragm itself as an exhaust valve and replacing the conventional tee with an open silicone deflector, exhalation effort is decreased.

At first glance, the exhaust deflector looks as though it were installed upside down. It sits above the regulator housing and looks like a rubber moustache. However, it works.

As a matter of fact, the entire GSD S-300 system worked so well that we subjected it to two additional rounds of tests, in the lab and in open water, to try and discover what makes it tick. First, it was taken to 100 feet and subjected to heavy breathing. The harder I breathed, the more air seemed to flow. It was at least the equal of my comparison regulator. Score one for GSD.

I couldn't make the S-300 freeflow more than a few bubbles and in every case it shut itself off with the mouthpiece still facing upward. Most sensitive regulators would freeflow until the mouthpiece was turned down. Purging was ridiculously easy. The second stage is so small that nearly no water is there to purge. The slightest exhalation does the job. In fact, if you inhale slowly, the air will bubble through the water without an initial exhalation. For lazier divers, the purge button's strong blast is almost overkill. Score more points for GSD.

There was no water leakage in any position, even upside down. This qualifies it as a dry breathing regulator. Because of

the pilot valve design, breathing effort remained the same regardless of body position. Most single hose regulators breathe much harder when the diver is on his or her back. Position had no perceptible effect on the S-300.

The combination of an open exhaust deflector and using the diaphragm as an exhaust valve made exhalation nearly effortless. The tee is so small you don't notice its upside down position. It doesn't get in the way, even when you hold your nose to clear your ears.

It's hard to find fault with the GSD S-300. Perhaps the hose is a little short. Its hiss is louder and a bit more mechanical sounding than a conventional regulator. When just sipping air, a higher initial (cracking) effort is felt. Sometimes it tends to stutter a bit when sipping. But with normal, or above normal demand, the air flows freely and easily.

The high cracking threshold provided the clue to the mystery of its unusual breathing characteristics. As the saying goes, "There ain't no free lunch." In regulator design, you've got to give up something to eliminate freeflow. The GSD people gave up low cracking effort. It takes a bit more to get the S-300 started, but once it is the power assist takes over and air comes freely and profusely. The time you want high airflow is when you're working hard at depth—and this regulator provides it.

One question remained: Why is the intermediate pressure set at only 60 psi, when other manufacturers set theirs at 140 and above for better performance? To find out, I attached the S-300 second stage to my 140 psi first stage. Performance was terrible. Cracking effort increased and so did the stuttering effect, this time with normal breathing. That answered the question. Since the tilt valve works upstream, it opens against intermediate pressure. The higher that pressure, the more force is needed to open it and keep it open. It needs low pressure to work effectively. Consequently, the second stage must be mated to a GSD first stage. Mixing octopus second stages is not recommended.

GSD's S-300 is an unusual regulator with high-performance breathing and without many of the idiosyncracies that often accompany that feature. It comes in a polyethylene carrying case with spare O-rings and a detailed instruction manual, which even leads you through disassembly of the second stage. Retail price is \$300. For further information contact the distributor, GSD North American Sports, Inc., 275 Winchester Avenue, New Haven, Connecticut 06511. 

DIVER'S DIRECTORY



Advertising rates: \$153.00 for three consecutive ads, \$264.00 for six consecutive ads, \$396.00 for a full year. DEADLINE: 28th of 3rd month prior to publication. PAYMENT MUST ACCOMPANY COPY. Send all material to: Diver's Directory, c/o Direct Marketing Division, P.O. Box 69910, Los Angeles, CA 90069.

ALABAMA

MCWHORTER ENGINEERING CO. 205/836-2814
P.O. Box 9014, Plant 1053, Gadsden Rd., Birmingham, AL 35213
Rebuilds, parts, accessories, ASME coded.
HP air compressors, units, systems, since 1952.

ARKANSAS

RICK'S PRO DIVE N SKI SHOP, INC. 501/753-6004
2323 Poplar St., N. Little Rock, AR 72114
Arkansas' only PADI 5 star training facility w/indoor pool. Dive boat, dive vacations. We teach 9 PADI specialties.

CALIFORNIA

AQUATICS OF SANTA BARBARA 805/964-6689
5370 Hollister Ave., #3, Santa Barbara, CA 93111
Channel Islands Charter, rentals, sales, repair, air.
Instruction: SSI, NAUI, PADI beginning to Divemaster courses.

ARGO DIVING SERVICES 213/510-2208
79 Canyon Terrace, P.O. Box 1201, Avalon, CA 90704
Guided underwater tours and instruction by
Jon Hardy on Catalina Island. Free information.

CATALINA DIVERS SUPPLY 213/510-0330
Avalon, Catalina Island, CA 90704
Rentals, sales, air, 2 locations.
Pleasure Pier and Avalon Underwater Park.

CATALINA UNDERWATER CONNECTION 714/661-0320
P.O. Box 135, Dana Point, CA 92629
Custom boat charters, guided U/W tours, 6 divers max.
PADI open water & specialties instruction, rentals.

OPENWATER HABITAT, INC. 714/633-7283
417 S. Main, Orange, CA 92668 CA 800/334-OHMS
Centrally located. PADI 5 Star instructor devl. centre.
Beginner to instructor courses, pro mtls/sls/svs, dv. trips.

PACIFIC CAMERA SERVICE 714/642-7800
730 W. 19th St., Costa Mesa, CA 92627
Nikonos cameras & flash repairs. 24 & 48 hr.
service available. Custom modifications.

PASADENA DIVERS WEST 213/796-4287
2695-A E. Foothill Bl., Pasadena, CA 91107
Sales, service, air, PADI, NAUI, instruction.
Rentals, boat trips, underwater photography, tours.

PROFESSIONAL S.C.U.B.A. REPAIR 818/769-1484
5725 Cahuenga Bl., No. Hollywood, CA 91601
Professional repair is our only business.
Servicing all makes and models of equipment since 1961.

SCUBA DUBA DIVE 818/881-4545
7126 Reseda Bl., Reseda, CA 91335
Mon-Sat: 10-7. Underwater photo specialist.
Boat trips, instruction, sales, service, rentals.

TRI-VALLEY SCUBA SCHOOL, INC. 415/828-5040
21310 San Ramon Valley Bl., San Ramon, CA 94583
Scubapro Dealer & full line of major brands.
The East Bay's 'full service' pro dive store.

WATER EDUCATION TRAINING (WET) 619/578-3483
8176 Miramar Rd., San Diego, CA 92126
YMCA, PADI, NAUI, resort courses through instr. Free weekly
scuba refresher courses. Full service vacation facility. Get WET.

CONNECTICUT

ORBIT MARINE SPORTS CENTER, INC. Open all year!
3273 Fairfield Ave., Bridgeport, CT 06605 203/333-DIVE
Foot of Broad St., Stratford, CT 06497 203/377-6969
Sales, rentals, air, service, NAUI, PADI instr., charters.

THE DIVING BELL 203/775-3573
782 Federal Rd., Brookfield, CT 06804
Open all year. 5 Star PADI, instruction, equipment rental, hydros,
photo, repairs, gifts. Travel with us. Local & island travel planned.

UNDERWATER SWIMMERS, INC. 203/932-0258
526 Main St., West Haven, CT 06516 203/828-3641
1038 Farmington Ave., Kensington, CT 06037
Discount prices, courses, rentals, repairs, air, hydros.

FLORIDA

AMERI DIVE 305/395-4407
7166 Beracasa Way, Boca Raton, FL 33433
Del Mar Shopping Village, corner Powerline & Palmetto.
Instr., sls, rental, svcs., air, travel, resorts, Scubapro, PADI.

BRENT FEINMAN'S SCUBA WORLD BY THE SEA 305/772-3933
4339 A Ocean Dr., Lauderdale-By-Sea, FL 33308
PADI facility, air, sales, service, rentals, dive charters,
reef trips. All levels of cert. private & group lessons.

CRYSTAL LODGE MOTEL & DIVE CENTER 904/795-6798
US 19 N., P.O. Box 456, Crystal River, FL 32629
Manatee & spring diving, boats, equipment rental.
Heated pool, seafood, bar, rooms at low prices.

DEEP SIX DIVE & WATERSPORTS Beach Diving Report
1550 Old Dixie, Vero Beach, FL 32960 305/562-2883
Closest beach dive to Disney, reef within 50 ft. of beach.
Lobster, wreck, treasure, PADI 5 star IDC full svcs. store.

DIVER'S DEN 305/595-DIVE
12614 N. Kendall Dr., Miami, FL 33186
8280 State Rd. 84, Ft. Lauderdale, FL 33324 305/473-9499
PADI 5 Star instruction, sales, service, rentals, trips, air photo.

DIVER'S DEN/PNEUMATIC SYSTEMS, INC. FL 904/871-4777
4720 E. Bus Hwy. 98, Panama City, FL 32404 800/272-4777
Sales, rentals, service, fast charter boats, 6-15 passengers
Instr. NAUI, PADI. Compressor sales, service, maint., overhaul.

DIVERS UNLIMITED 305/981-0156
6023 Hollywood Bl., Hollywood, FL 33024
Awarded #1 training facility by PADI. All brands, whsl/rtl, daily boat
trips, repair, rental, classes, travel. 5 Star PADI training facility.

DIVERS UNLIMITED/FORT LAUDERDALE 305/524-4862
440 Seabreeze Bl., Ft. Lauderdale, FL 33316
Daily boat trips, training dives, classes, retail-all brands, leisure-
wear, rentals. Packages w/Days Inn. 5 Star PADI training facility.

DIXIE DIVERS 305/461-4488
Of Ft. Pierce, 1717 S. U.S. 1, FL 33450 305/283-5588
Of Stuart, 1843 S.E. Federal Hwy., FL 33494
PADI 5 Star IDC facility. Open 7 days, full service.

FANTASEA SCUBA HEADQUARTERS 904/837-0732
P.O. Box 5498, #1 Hwy. 98, Destin, FL 32541 904/837-6943
PADI 5 Star instructor Development Center, D.V.I. resort,
sales & service, gulf charters, instruction, rental, air, travel.

FORCE-E, 1399 N. Military Trl., W. Palm Bch., FL 305/471-2676
877 E. Palmetto Pk. Rd., Boca Raton, FL 305/368-0555
2700 E. Atlantic Blvd., Pompano Beach, FL 305/943-3483
2104 W. Oakland Park Blvd., Ft. Lauderdale, FL 305/735-6227

GINNIE SPRINGS, INC. 904/454-2202
Rt. 1, P.O. Box 153, High Spring, FL 32643 800/874-8571
Six 72° clear blue springs, camping, canoeing.
Complete resort dive facility. Cavern instruction.

GULF STREAM DIVER SCUBA CHARTERS 305/965-7878
2315 Caroma Ln., West Palm Beach, FL 33406
Palm Beach daily reef & wreck dives, pro. charters,
Bahama boat trips. 2 new USCG 38' & 41' cust. dv. boats.

HYDROSPACE DIVE SHOP 800/874-3483
3605-A Thomas Dr., Panama City Beach, FL 32407 904/234-9463
The Gulf Coasts' largest and most experienced dive service.
5 boats 46', 42', 40', 24'. Full service facility.

LAUDERDALE DIVER 305/GO-SCUBA
1334 S.E. 17th St., Ft. Lauderdale, FL 33316 "on the Causeway"
Complete master diver program. PADI distinguished service
award. Instr., sales, service, air, photo, trips. Widest selection.

MAC'S SPORTS 813/442-9931
2126 Drew St., Clearwater, FL 33575
One of the world's largest diving stores & school.
Pool on premises, local & Caribbean trips.

NORINE ROUSE SCUBA CLUB OF THE PALM BEACHES
4708 N. Dixie Hwy., West Palm Beach, FL 33407 305/844-2466
A membership club for certified divers.
Dive trips 6 days a week.

PLANTATION INN MARINA 904/795-5797
P.O. Box 1093, Crystal River, FL 32629.
Instruction, rentals, boats, canoes, pkg. deals, pvt. Manatee obser.
deck and air sta. at Divers Giant Spring. Golf, tennis, 150 rooms.

PROFESSIONAL DIVING SCHOOL/CHARTERS OF FLORIDA
Bahai Mar Yachting Center, Ft. Lauderdale, FL 33316
Basic-divemaster training/specialties-night, deep, wreck.
Daily reef & wreck dives. 305/761-3413 800/772-DIVE

'SCUBA TOO' CAPT. JOE SCHIRCK 305/989-5813
Ft. Lauderdale's oldest continuing dive operation. Pet &
feed Oliver the Moray Eel featured on "Those Amazing Animals".
PADI instructor on every dive, 6 persons maximum.

THE SCUBA SHACK, INC. 305/334-8808
2485 N.E. Dixie Hwy., Jensen Beach, FL 33457
The Treasure Coast's oldest full service dive shop.
PADI instruction, air, sales, rentals, repairs, trips.

FLORIDA KEYS

A KEY LARGO CONDO Call collect 813/939-3612
Moon Bay deluxe 2 BR, 1 1/2 bath w/dock, sleeps 6. Near
Pennekamp, dive centers, marinas and Largo cut. Scuba,
snorkel, fishing, skiing, tennis. \$395 per wk. Reserve early.

A KEY LARGO WATERFRONT HOME 305/661-1507
3 BR/2 Bath, 1/2 mi. to Pennekamp, sleeps 8, with 40' dock. Great
diving, snorkeling, fishing & sailing; 200 yds. from FL Bay.
Weekly or seasonal rentals available at reasonable rates.

AMERICAN DIVING HEADQUARTERS, INC. 305/451-0037
Rt. #1, P.O. Box 274-B, Key Largo, FL 33037
SSI, PADI, NAUI. Pennekamp our specialty for 23 years. 2-7 day
packages, 1/2 & all day trips, for res. call toll free 800/634-8464

AMERITRAVEL DIVING PACKAGES US & FL 800/551-4000
5900 SW 73 St. #204, S. Miami, FL 33143
Unique dive packages anywhere in the keys.
Custom tailored to any budget, individuals or groups.

AQUATIC FLOATING SEA COVE MOTEL 305/289-0800
12685 Overseas Hwy., Marathon, FL 33050
Budget rates, Summer \$14-\$29, Winter \$19-\$39 for two.
Private deep harbor & ramp on Atlantic. A#1 rooms and effs.

BUDDY'S DIVE SHOP 305/664-4707
P.O. Box 409, Islamorada, FL 33036 MM. 79.5 Bud 'n Mary's Marina
Dv. aboard our 40' 'Scuba Safari' & 34' 'Free 'n Clear'. Full/1/2 day
trips to Alligator Reef, Cannabis Cruiser & Coral Gardens. Pkgs. avail.

CAPT. CORKY'S DIVERS' WORLD OF Key Largo, Inc. 305/451-3200
P.O. Box 1663, Key Largo, FL 33037 MM. 99.5 U.S. 1 past Wendy's
Bahamas/Pennekamp, U/W video rental, snkl. w/dolphins, PADI instr.,
grp. rates, dive, snkl., sail, shell collect, spearfish. Best pkg. rates!

CAPT. GREG'S SCUBA-DO 305/451-3446
P.O. Box 2237, Key Largo, FL 33037 MM.100 @ 100 Marina
Dive Pennekamp, 34' boat, 6 max. Avoid crowded boats.
Enjoy personal service. We dive with you. Best dive pkg. rates.

CAPT. SLATE'S ATLANTIS DIVE CENTER 800/331-DIVE
51 Garden Cove Dr., Key Largo, FL 33037 MM.106.5 305/451-1325
Dive Pennekamp on 1 of 4 cust. boats. NAUI, YMCA, PADI, CMAS.
Instr., air & rentals, grp. & multi-dive disc., pkgs., gifts.

CORAL LAGOON RESORT AT THE DIVING SITE 305/289-0121
Middle Keys, MM.53, 12399 Overseas Hwy., Marathon, FL 33050
Waterfront efficiency cottages, dockage, pool, tennis, bikes.
PADI dive shop, lessons, 3 boats, groups, spring/fall dive pkgs.

DIVE KEY WEST 305/296-3661
'Carol J', P.O. Box 2842, Key West, FL 33045
Disc. room pkg. & grp. rates. Max. 6 divers.
Lobster diving & spearfishing, rentals, air.

GOLDEN KEY MOTEL 305/664-4418
(US) Rt. 1, Box 710, Islamorada, FL 33036 MM. 81
Free dockage & boat ramp, waterfront cottage,
rooms with stove & refrigerator, picnic & barbeque area.

HALL'S DIVING CENTER & RESORTS 305/743-5929
1688 Overseas Hwy., Marathon, Keys 33050
Guaranteed "Weather-Proof" reef trips and dive packages.
Lessons start every day. All major brands and credit cards.

HAWK'S CAY RESORT & MARINA US 800/327-7775
MM 61, Marathon, FL 33050 FL 800/432-2242
Tennis, pools, jacuzzis, reef trips, PADI.
Custom-built dive boats, air/equip. rental, instr., pkg. rates.

HOLIDAY ISLE DIVE & SWIM CENTER 305/664-4145
P.O. Box 482, Islamorada, FL 33036 MM. 84.5 FL 800/432-2875
New dive boat. 305/743-7000
Group rates and scuba instruction.

KEY LARGO CONDO 305/433-8073
3 BR., 1 1/2 Bath, completely furnished. 305/546-2275
Marina, saunas, tennis, pools, 2 mi. Pennekamp Park.
Great diving, fishing, sailing. Special summer rates.

KEY LARGO BAYFRONT HOME—Dive, Snorkel-Sail P.O. Box 161414, Miami, FL 33116 3 bedroom/2 bath gorgeous, new, private home with dock. Luxuriously furnished, fantastic rates from \$11/day/per./wk.	305/255-4556
KEY LARGO LUXURY CONDO Oleinik, 8555 Blue Cut Ln., Cincinnati, OH 45243 Luxuriously decorated, 2 bedroom, dock, pool, sauna, tennis. Minutes from best dive areas.	513/984-0866
KEY WEST CONDO c/o Box 733, Matawan, NJ 07747 2 BR ocean front condo, 2 pools, 2 tennis courts, beautiful grounds, sleeps 4, spec. div. rates May-Nov. \$495/wk. Reserve early!	201/591-1508
KEY WEST LUXURY ACCOMMODATIONS Designer 2 BR/2 bath townhouse, pool, jacuzzi, cable TV, dishwasher, washer/dryer, near all best dive areas.	718/434-1716 201/367-4764
LADY CYANA DIVERS P.O. Box 1157, Islamorada, FL 33036 MM 85.9 Daily reef trips aboard our 40' and 60' custom dive boats. Rentals, air, sales, service, instruction, group rates, packages.	305/664-8717
LOOE KEY REEF RESORT & MARINA P.O. Box 509G, Ramrod Key, FL 33042 MM.27 Singles, doubles, tv, pool, spa, restaurant, ramp, dockage. Compl. dive shop, instr., USCG cert. custom dive boat, grp. rates.	305/872-2215
PENNEKAMP PARK CONCESSION Box 13M, MM 102.5, Key Largo, FL 33037 The only dive shop located directly in Pennekamp. Free brochure, send 50¢ for reef chart.	305/451-1621
QUIESCENCE DIVING SERVICES, INC. P.O. Box N-13, Key Largo, FL 33037 MM. 103.5 Personalized charters in Pennekamp, only 6 divers per boat. Instruction; Basic, Advanced, Specialty courses.	305/451-2440
RENT 20' FLORIDA KEYS DIVE BOAT and stay aboard 46' furnished houseboat, color TV, A/C, sleeps 6, Dive Pennekamp, Looe Key, Alligator Reef, crystal dive water. \$695 week.	305/743-0391
RENT 28' FLORIDA KEYS DIVE BOAT Dive all the Keys hot spots from this fast, comfortable, twin engine dive boat. Sleep aboard 4, galley, shower, A/C, flybridge, dive platform, boarding ladder, \$795 wk.	305/852-9076
ROCK REEF RESORT P.O. Box 73, Key Largo, FL 33037 MM. 98 Divers Paradise, spacious grounds, beach, jacuzzi, comfortable accommodations and comfortable prices.	305/852-2401
SEA CENTER DIVE SHOP P.O. Box 515, Big Pine Key, FL 33043 MM. 29.5 Dive Looe Key, custom boats, dive/lodging packages. PADI facility, full service shop, 24 hr. hydro.	305/872-2319
SEA DWELLERS SPORTS CENTER 99850 Overseas Hwy., Key Largo, FL 33037 Dive and snorkel Pennekamp Park. Special weekday rates.	305/451-3640
SEA TRAIL MOTEL Rt. 5, P.O. Box 91, Key Largo, FL 33037, MM 98.5 Cable TV, air conditioned, refrigerator, budget rates, 10% discount. Advanced reservations May through Nov.	305/852-8001
SEAFARER RESORT MOTEL P.O. Box 185, Key Largo, FL 33037 MM. 97.8 (Gulfside) 'Fantasy Island' setting, real sandy beach & free paddle boat. Clean rooms & efficiencies. Please contact us for group rates!	305/852-5349
STEVE KLEM U/W GUIDE SERVICE P.O. Box 1803, Key Largo, FL 33037 MM. 104 Dive with the legendary "Pied Piper of Pennekamp Park". Let Steve introduce you to his U/W pets. 6 divers only.	305/451-1831
THE BOAT, a div. of Triangle Watersports, Inc. Rt. 2, Box 617, Summerland, FL 33042 Free color brochure, customized dives, adventure experiences, instruction, U/W video, Looe Key (FL Keys), Belize(Central America).	305/745-BOAT
THE DIVING SITE, INC. 12399 Overseas Hwy., Marathon, FL 33050 MM. 53.5 30, 16 & 6 pass. dive boats. Daily reef trips. Charters & group rates, PADI lessons, sales, repairs, dive pkgs.	US 800/634-3935; FL 800/821-9155 305/289-1021
THE REEF AT MARATHON RESORT CLUB P.O. Box 871, Marathon, FL 33050 2 BR/2 BA villas, efficiencies, motel rooms, tennis, pool, clubhouse & manna. Dive pkgs. & mtl. boats avail.	US-800/327-4836 FL-305/743-7900

GEORGIA

DIVERS SUPPLY 5208 Mercer Univ. Dr., Macon, GA 31210 PADI training facility, all major brands. Located at exit 2 on I-475	912/474-6790
DIVING WORLD USA 2945 Buford Hwy., Atlanta, GA 30329 All brands, wholesale, retail, repair, rental, trips. YMCA, NAUI, PADI classes. 3-man chamber.	404/634-4354

HAWAII

ALOHA DIVE SHOP—KOKO MARINA Koko Marina Shop, Ctr., Honolulu, HI 96825 'Diving is fun' with Jackie and her friends. Scuba resort cert., boats, tours, sales, rental, all cert.	808/395-5922 808/395-8882
AQUATIC CHARTERS OF MAUI P.O. Box 1028, Puunene, Maui, HI 96784 1985 custom dive boat 'Pili'alo'ha', 2 to 6 divers. Dive Molokini, Lanai, Kahoolawe. U/W video services.	808/879-0976 808/874-0859
AQUATICS KAUAI 733 Kuhio Hwy., Kapaa, HI 96746 Full service, PADI, NAUI, SSI, U/W video taping & photo. Custom packages & tours aboard our 38' Wilson	808/822-9213
CAPT. NEMO'S OCEAN EMPORIUM 700 Front St. & Dickenson, Lahaina, Maui, HI 96761 1st class diving & sailing, compl. shop: sales, rentals & cameras. 58' catamaran, 26' cruisers, small groups, complete dive packages.	808/661-5555 800/367-8088
CAPT. NEMO'S OCEAN SPORTS ANAHOOMALU Sheraton Waikaloa Hotel, P.O. Box 3291 WVS, Kamuela, HI Fantastic diving & sailing, windsurfing lessons & rentals. 42' catamaran, Zodiac dives, camera rentals, small groups, dive pkgs.	808/885-6064
CUSTOM DIVE SERVICE P.O. Box 90, Makawao, Maui, HI 96768 'Windward side' scuba charters for only the very healthy, very experienced & well equipped diver. Write for application & details.	808/572-0245
DIVE KAUAI 976 Kuhio Hwy., Kapaa, Kauai, HI 96746 Kauai's largest sport & commer'l facil., disc. prices, sales, mnts., free air, PADI, NAUI cert., sm. pers. char., indiv. & grp. pkgs.	808/822-0452
DIVE MAKAI CHARTERS P.O. Box 2955, Kailua-Kona, HI 96745 Diving with a difference, we care! Write to Tom & Lisa. Rated Kona's best every year since '76 by Undercurrent.	808/329-2025 Priv. PADI instr.
DIVE MAUI INC. Lahaina Market Pl., Lahaina Luna Rd., Lahaina, HI 96761 Full service NAUI, PADI, SSI store. 3 boats leaving daily for Maui, Lanai, Molokini. Free maps. Photog. avail.	808/667-2080 or 661-4363
HAWAIIAN WATERCOLORS P.O. Box 616, Kihei, Maui, HI 96753 Experts in dive charters, U/W video, U/W photography. Contact Ed Robinson for information.	808/879-3584
KONA COAST DIVERS 75-5614 Palani Rd., Kailua-Kona, HI 96740 Kona's finest daily charters, priv. PADI/NAUI instr. Retail, rentals, air & vacation pkg. available. Write today.	808/329-8802
LAHAINA DIVER'S INC. 710 Front St., Lahaina, Maui, HI 96761 Daily trips aboard 2 fastest, most comfortable boats in Hawaii. Most personable staff. Maui's only PADI 5 Star.	800/367-8047 ext. 102 808/667-7496
LEEWARD DIVE CENTER 85-979 Farrington Hwy., Waianae, HI 96792 3 boats daily with over 50 different dive sites. Dive the Mahi, '165' wreck, the plane, turtles & all in small groups.	808/696-3414
MAUI DIVE SHOP P.O. Box 1018, Azeka Place, Kihei, HI 96753 Send for free Maui Diver's Guide, enclose \$1 postage. Dive charters to Molokini, rentals, 5 day scuba classes, windsurfing.	808/879-3388
MIKE SEVERNS SCUBA DIVING P.O. Box 627, Kihei, Maui, HI 96753 Small groups, 5 cert. divers max. Guided boat dives. Two person privates w/Tekna DVX3 scooters.	808/879-6596
OCEAN ACTIVITIES CENTER 3750 Wailea Alanui, D-2, Wailea, HI 96753 Hawaii's only dive lodge: Hotel Lana. Daily dives to Molokini, La Perouse, Kahoolawe, Lanai.	808/879-4485
OCEAN ADVENTURES, INC. 98-406 Kam. Hwy., Pearl City, HI 96782 PADI 5 Star instructor dev. center, diver vehicles, tours, group pkgs., boat dives, cameras, 3/4 day certs.	808/487-9060
SANDWICH ISLE DIVERS 73-1263 Lihau St., Kailua-Kona, HI 96740 Daily boat charters, max. 6 divers, night dives, PADI classes. Packages available. Undercurrents choice. Call or write.	808/329-9188
SEA DREAMS HAWAII P.O. Box 4886, Kailua-Kona, HI 96745 Fast, comfortable custom dive boat. 2 to 6 divers. 1 trip daily. 1st class equipment, friendly service. PADI instr.	808/329-8744 808/322-6118
SEA PARADISE, SCUBA P.O. Box 5655, Kailua-Kona, HI 96745 Kona's best charter company. Explore reefs, lava tubes & archways. Our 'pampered diver' service will spoil you forever. PADI & NAUI.	808/322-2500
SEA SAGE DIVING CENTER 4-1378 Kuhio Hwy., Kapaa, Kauai, HI 96746 Safely serving Kauai since 1973. Complete pro facility. Boat/shore trips. Accommodation pkgs. available.	808/822-3841
SOUTH SEAS AQUATICS 1050 Ala Moana Bl., Honolulu, HI 96814 Dive the Mahi, '165' shipwreck and lava tubes! Daily boat charters. Full service pro dive store since 1961. Write for free brochure.	808/538-3854 808/538-3856
THE DIVE SHOP OF KIEHI LTD. 1975 S. Kiehi Rd., Kiehi, Maui, HI 96753 Daily dive & sn. to Molokini, 3-5 day cert. op. water check-outs Full svc. facility, Maui Divers Guide 6.95 + P & H.	808/879-5172

WAIKIKI DIVING, INC.—WAIKIKI DIVING SCHOOL 420 Nahua St., Honolulu, HI 96815 Waikiki's only pro dive shop. PADI & NAUI facility. Boat dives, sales, rentals, charters. Free brochure.	808/922-7188 808/922-7189
--	------------------------------

ILLINOIS

THE GEAR BAG, INC. 1605 N. Newland, Chicago, IL 60635 Located at 6900 west on North Avenue. NAUI pro facility & PADI training facility.	312/637-FINS
--	--------------

INDIANA

SCUBA LAKE MICHIGAN CHARTERS Capt. Ernie Piotrowski, 234 N. Albert St., S. Bend, IN 46619 Dive aboard Sea Quest II. Club/shop rates, rentals, Special Thur. & Fri., 5-tank charters, discount program.	219/287-2223
---	--------------

LOUISIANA

SEA HORSE DIVING ACADEMY, INC. 5400 Crowder Bl., Unit E, New Orleans, LA 70127 PADI 5 Star instructor development center, quality instruction, equipment, service and dive travel.	504/246-6523
---	--------------

MAINE

AQUA CITY SCUBA, INC. 11 Water St., Waterville, ME 04901 Sales, in-shop repair service, rentals, NAUI & PADI training facility. Central Maine's largest dive shop.	207/873-0266
TOMMY'S HARDWARE—TOMMY'S DIVE SHOP 273 Congress St., Portland, ME 04101 N.E.'s largest, known coast to coast, sis., svcs., mtl., air, hydro. YMCA, NAUI, PADI, wreck charters, mail order, discount prices.	207/772-5357

MARYLAND

DIVERS DEN, INC. 8105 Harford Rd., Baltimore, MD 21234 Maryland's oldest professional dive shop. Large enough to serve you — Small enough to know you.	301/668-6866
DYNAMO DIVE SHOP 8906 Rhode Island Ave., P.O. Box 1019, College Park, MD 20740 N.C. wreck dives, Florida trips, full service dive shop, PADI 5 Star, instruction, 24 hour wetline: 345-DIVE.	301/474-6380
TIDEWATER AQUATICS 1315 Forest Dr., Annapolis, MD 21403 Full service pro dive store & skin diving school. Authorized Scubapro dealer & warranty service center.	301/268-1992

MASSACHUSETTS

AQUARIUS DIVING CENTER, INC. 3239 Cranberry Hwy., Buzzards Bay, MA 02532 Authorized Scubapro dealer. PADI instruction, sales, full service, rentals, dive travel. Mon-Fri. 10-8, Sat. 9-5, Sun. 8-1.	617/759-DIVE
CAPE COD DIVERS, INC. 815 Main St., Harwich Port, MA 02646 Sales, service, air, professional instruction. 2 USCG approved diveboats and captains.	617/432-9035 MA 800/DIVING-1
LOWELL SCUBA CENTER 477 Gorham St., Lowell, MA 01852 Full service pro store, instruction all levels. Authorized Scubapro dealer.	617/453-7574
NORTHEAST SCUBA, INC. 125 Liberty St., Danvers, MA 01923 Scuba instruction, sales, air station, photo courses. Hydro test, regulator repairs, rentals, boat charters.	617/774-7296

MICHIGAN

SCUBA NORTH, INC. 13258 W. Bayshore Dr., Traverse City, MI 49684 Year round instruction, dive trips, local charters, rentals & repairs & hydro's, all major brands, pkg. prices.	616/947-2520
WOLF'S DIVER'S SUPPLY 250 W. Main, Benton Harbor, MI 49022 Discount prices, service, rental, instr., air, travel, USD, Dacor, Parkway, Mares, Viking, Tekna, SeaQuest, Ikelite.	616/926-1068

MINNESOTA

THE SUPERIOR DIVER, INC. 218/724-4655 or 475-2550
1905 Greysolon Rd., Duluth, MN 55812 Larry Sand & Bill Merrill
Shipwreck diving charters in the Isle Royale National
Park aboard the 'Royale Diver' & 'Superior Diver'.

MISSOURI

WEST END DIVING-S-BILLION GALLON LAKE RESORT
at Bonne Terre Mine, Bonne Terre, MO 63628 Dive
Fully illuminated underground lake, 1 hour from reservations
St. Louis. 70' visibility, 58° water temperature. 314/731-5003

WEST END DIVING CENTERS, INC.
11215 Nat. Bridge Rd., Bridgeton, MO 63044 314/731-5003
11004 Manchester Rd., St. Louis, MO 63122 314/822-3005
39 N. Allen, Bonne Terre, MO 63628 314/358-5000

NEW JERSEY

CEDAR GROVE DIVERS SUPPLY 201/857-1748
492 Pompton Ave., Rd. 23, Cedar Grove, NJ 07009
National certified instruction, private or group lessons.
Indoor heated pool, full service dive shop.

DOSIL'S SPORTS CENTER 201/787-0508
261 Rt. 36, E. Keansburg, NJ 07734
Discount prices, dive travel, wreck dives, rentals,
3000psi air fills, indoor pool, repairs.

EAST COAST DIVING SERVICE 201/591-9374
Spring Valley & Texas Rds., Morganville, NJ 07751
NJ's 1st PADI 5 Star training facility.
Sales, repairs, air, rentals, trips, photo, Rts. 9 & 18.

LAKELAND SCUBA DIVERS 201/887-0194
92 Route #10, E. Hanover, NJ 07936
Certified instruction, PADI, YMCA, NAUI. Indoor heated
pool, rentals, repairs, wreck dives weekly.

MARLIN SCUBA SHOP 201/327-6000
506 Rt. 17, Ramsey, NJ 07446
Full service PADI training facility.
Indoor heated pool, N.J. wreck dives, dive vacations.

PRINCETON AQUA SPORTS 609/924-4240
306 Alexander St., Princeton, NJ 08540
PADI training facility. Full service dive, snow
ski & windsurfing facilities. Diving vacations our specialty.

UNDERWATER SPORTS, INC. 201/843-3340
Rt. 17 S., Rochelle Park, NJ 07662
New Jersey's oldest and largest pro dive shop est. 1955.
Indoor heated pool, nat'l. certification, travel, all serv.

NEW YORK

AQUA CRAZY HARVEY 718/743-0054
3179 Emmons Ave., Brooklyn, NY 11235
At Sheepshead Bay. Instant refills.
Major brands, big discounts. Since 1953.

AQUA-LUNG CENTER, RICHARDS 212/947-5018
233 W. 42nd St., Times Square, New York, NY 10036
Export agent for all major brands. Dive, surf, swim.
Largest all year round dive shop. Will not be undersold.

ATLANTIS 2 212/924-7556
498 Sixth Ave., New York, NY 10011
New York's PADI 5 Star facility & Scubapro dealer.
Quality instruction, equipment, service, repair & travel.

CENTRAL SKINDIVERS DISCOUNT CENTERS Open 7 Days
2608 Merrick Rd., Bellmore, NY (indoor pool) 516/826-8888
160-09 Jamaica Ave., Jamaica, NY 718/739-5772
Refills, rentals, repairs, dive trips, PADI lessons. Our 34th year.

EAST COAST DIVING, INC. 718/979-6056
1500 Hylan Bl., Staten Island, NY 10305
PADI five star facility - Classes all levels.
Wreck charters on 50' dive boat.

ISLAND SCUBA CENTERS, INC. 516/546-2030
74 Woodcliff Ave., Freeport, NY 11520
Sales, air, rentals, repairs, waterfront store, travel.
Instruction, photo equip., rentals, Club Aquarius.

KINGS COUNTY DIVERS CORP. 212/648-4232
2417 Avenue U, Brooklyn NY 11229
Authorized Scubapro dealer. 212/934-4153
Brooklyn's full service pro shop.

NIAGARA SCUBA SPORTS 716/875-6528
2048 Niagara St. (near Hertel), Buffalo, NY 14207
Western New York's full service pro dive shop.
PADI 5 Star facility. Scubapro & other major brands.

PAN AQUA DIVING 212/496-2267
166 W. 75th St., New York, NY 10023
On-site air, equipment, rentals, repair-7 days a week.
NAUI, PADI, YMCA: Basic-Instructor. Local, group trips & travel.

PROFESSIONAL DIVE TRIPS, INC. 718/332-9574
3662 Shore Pkwy., Brooklyn, NY 11235. Capt. Bill Reddan
Abroad 40' M/V Terry, USCG licensed, full equipment,
wreck's, lobster, night dives, advanced courses, YMCA, PADI, IDEA.

SOUTH BAY DIVING CENTER 516/785-3449
3028 Merrick Rd., Wantagh, NY 11793
Areas most comprehensive supplier of dive equipment.
Long Island best wreck diving.

WESTCHESTER DIVE CENTER & SCHOOL 914/937-2685
62 Westchester Ave., Port Chester, NY 10573
Northern Division, Mahopac, NY 914/628-1386
Area's most comprehensive year round, scuba school.

ZODIAC WATCH CO., FACTORY DIVE WATCH REPAIR CENTER
565-5th Ave., New York, NY 10017 enter 9 E. 46th St. 212/490-3525
Zodiac Sea Wolf and all brands serviced and pressure tested.
Heuer and Chronosport sales. Huge discounts.

NORTH CAROLINA

DIVE BOAT OLYMPUS I 301/474-6381
Pier 8, Morehead City, NC 28557 919/726-9432
Dive the clear warm waters of NC on area's largest dive
boat. Groups up to 25 or individual walk-ons.

EASY STEP CHARTERS/EJW SPORT SHOP 919/726-2311
2204 Arendall St., Morehead City, NC 28557 919/247-4725
2 dive boats, 24 hr. hydro & repairs, specialty courses.
(Wreck, deep, night, boat, search & recovery, equipment repair.)

NAGS HEAD PRO DIVE CENTER 919/441-7594
P.O. Box 665, Nags Head, NC 27959
Wreck U85, schooners, WWII freighters, tankers, aboard Sea Fox.
50' custom boat, PADI instr., sales, svcs., mtls., air, 5000 PSI.

SALTSHAKER DIVING SERVICES, INC. 919/726-8852
P.O. Box 275, Morehead City, NC 28557 6 plus divemaster.
Dive over 25 wrecks in our area including the German sub U-352,
the US sub USS Tarpon or the luxury steamer SS Proteus.

THE DIVE SHOP 704/459-7440
1-40 Claremont Exit, Claremont, NC 28610 704/459-7224
PADI instruction, air, sales, rental, repair, trips. Caribbean
& Florida trips, wreck dive & fish charters off NC coast.

OHIO

LONG LAKE SCUBA 419/331-3483
3160 Long Rd., Lima, OH 45807
PADI training facility.
Sales, service.

PENNSYLVANIA

DON COOK'S SCUBA EQUIPMENT 717/326-2091
940 Market St., Williamsport, PA 17701
Air, certified instruction, PADI, sales, service.
PADI training facility, pro dive shop. Closed Wednesday.

DUDAS' DIVING DUDES 215/436-0176
101 Bartram's Ln., West Chester, PA 19382
Full service NAUI pro facility. PA's largest selection of wet
& dry suits. Full line of photo equip. Wreck & southern dive trips.

HARRISBURG SCUBA CENTER, INC. 717/561-0517
991-A Peiffer's Ln., Harrisburg, PA 17109
5 PADI certified instructors, sales, service, rentals, air, dive
trips. PADI training facility. Weekdays 6 PM-9 PM, Sat. 9-5.

MID-ATLANTIC SCUBA CENTER 215/628-4935
320 E. Butler Ave., Ambler, PA 19002 215/245-0141
3540 Street Rd., Bensalem, PA 19020
PADI instruction, sales, rentals, repairs, trips.

SMOKEY'S DIVER'S DEN 717/393-5333
412 N. Duke St., Lancaster, PA 17602
Certified instruction, rentals, sales, service. U/W films &
video tapes. Programs for schools, clubs & organizations.

THE DIVING BELL, INC. 215/763-6868
681 N. Broad St., Philadelphia, PA 19123
Discounts for scuba students and dive club members.
Free parking on Pryn (Prine) Bearings parking lots.

RHODE ISLAND

DIVERS WORLD (DIV. OF ALPINE) 401/849-3330
754 Main St., E. Greenwich, RI; 100 Main St., Westerly, RI &
Bellevue Plaza, Newport, RI. Comp. sls. & svcs. Disc. prices,
all top brands. Low rates on lessons. RI's most comp. dv. shop.

VIKING DIVE SHOP 401/847-4179
124 E. Main Rd., Newport, RI 02840 Rt. 138
Air, sales, rentals, repairs, hydros, instruction.
Wet and dry suits repaired and altered.

TEXAS

ARLINGTON SCUBA CENTER, INC. 817/265-6712
2414 W. Park Row Dr., Arlington, TX 76013
PADI 5 Star training, air, sales, rental, repair, trips.
Most complete pro service in North Texas.

DIVER'S DEPOT 409/564-DIVE
720 South St., Nacogdoches, TX 75961
PADI 5 Star IDC, all levels thru instructor.
PADI course directors for contract instruction anywhere.

KENLEE'S SCUBA CENTER-COZUMEL EXPERTS 713/932-6488
5705 Glenmont, Houston, TX 77081 713/661-6080
Trips to Cayman, Baja, Bonaire, Belize, Honduras, Red Sea
Truk Lagoon, 11/15-29, Australia, 12/1-16. Free schedule.

SCUBA AIR COMPRESSOR SERVICE, INC. 214/661-8695
14055 Proton Rd., Dallas, TX 75234
New/used high PSI compressors.
Sales, service, overhaul, parts, rentals.

VIRGINIA

SEA VENTURES, INC. 703/425-7676
Pickett Shopping Center, 9444 Main St., Fairfax, VA 22031
Northern VA's complete dive shop.
Trips, instruction, sales, rentals, repairs. NAUI, YMCA, & PADI

"THE" DIVE SHOP 703/698-7220
2841 Rogers Dr., Falls Church, VA 22042
PADI 5 Star instructional development center,
full service serving Wash., DC, metro area.

THE WET ONES, INC. 703/938-1111
163 Glyndon St., Vienna, VA 22180
No. VA oldest PADI 5 Star facility, instr. all levels,
sales & service, grp. & indiv. trips, photography.

WASHINGTON, DC

NATIONAL DIVING CENTER 202/363-6123
4932 Wisconsin Ave. NW, Washington, DC 20016
Authorized Scubapro sales & service,
quality instruction, trips, rentals.

WEST VIRGINIA

HUNTINGTON SPORT & COMMERCIAL DIVING CENTER
U.S. 60 & I-64 Exit 15 at Carroll's 304/529-6622
4901 U.S. Rt. 60 East, Huntington, WV 25705
Ask for Charley. 304/736-3861

WISCONSIN

3 LITTLE DEVILS SCUBA SHOP 608/356-5866
Rt. 4, Hwy. 123, Baraboo, WI 53913 800/356-9016 & 9017
North entrance to Devil's Lake State Park. PADI 5 Star Instructor
facility, Lake Superior & West Palm Beach charter boat.

CANADA

BEACH GARDENS DIVING RESORT LTD. 604/485-6267
7074 Westminster Ave., Powell River, B.C., Canada V8A 1C5
Dive the Emerald Sea with Jim Willoughby-Diving Director.
Charter boats, group rates, air, U/W guides.

MAGNA YACHTING LTD.-DIVE CLAVELLA 604/753-3751
P.O. Box 866-A, Nanaimo, B.C., Canada V9R 5N2
Shipwrecks, photo & explore entire B.C. & Alaskan coast
in comfort aboard 57' Clavella. All incl. & great rates, too!

RENDEZVOUS DIVE VENTURES LTD. 604/724-4271
Box 135, Port Alberni, B.C. V9Y 7M6. Departs from Port Alberni.
Dv. Barkley Sound on Vancouver Is. W. Coast. 45' charter boat
& lodge, grp. rate only, max. 10, all incl. Operating since 1975.

AUSTRALIA

AUSTRALIA-BARRIER REEF & CORAL SEA Ph. Int. +61-77-723022
Mike Ball Watersports, 252 Walker St., Townsville, QLD. 4810
Single or group bookings, 6 dive boats, 1-8 days.
Yongala wreck dives. PADI training facility. Telex 47320

AUSTRALIA GREAT BARRIER REEF-LIVE ABOARD BALI HAI II
P.O. Box 692, Cairns 4870 Q'land, Australia, ph. 070/545545
Dive Cod Hole, Ribbon Reef, Lizard Is., 150 mi. of outer reef.
7 & 10 day sched. depart., for indiv., groups & spec. chtr.

DIVEMASTER CHARTERS Tlx: AA47384 Divemaster
P.O. Box 1450, Townsville 4810, Australia Ph: 077-741363
Ext. dive trips to Australia's Outer Great Barrier
Reef & Yongala wreck. Guar. depart. Indiv. bookings.

GREAT BARRIER REEF AND CORAL SEA +6170-514055
Going Places, 26 Abbott St., Cairns, Qld. 4870 Tlx: AA48338
Adventure travel specialists to Australia & New Guinea. Over
20 dive boats & island dives from day trips to extended charters.

BAHAMAS

ABACO BAHAMAS 805/965-1216
2 waterfront cottages for rent—5 minutes from dive shop.
\$350 & \$400/week. White Sound, Elbow Cay.
Liquorik, 106 Loyola Dr., Santa Barbara, CA 93109

EDWINA'S PLACE 809/334-2094
P.O. Box 30, Rock Sound, Eleuthera, Bahamas
On our island are the most beautiful waters, reefs like no place on earth, restaurant, good food, nice clean rms., right on beach.

EXUMA DIVERS CO. 809/336-2710
P.O. Box 110, George Town, Exuma, Bahamas
Exuma's most personal diving company.
Enjoy our coral reefs or blue holes, or both!

M/V SEA AGGRESSOR 305/747-6647
P.O. Box 1778, Jupiter, FL 33468. USA Docks/Riviera Bch. Marina
Swim with dolphins in the wild! Great meals, fantastic diving.
90' luxury live aboard Bahamas bound dv. vessel. Dpts. W. Palm, FL

SMUGGLER'S REST DIVE RESORT 800/328-8029 ext. 246
P.O. Box N8050, Nassau, Bahamas 809/326-1143
Discover southern New Providence diving. Wrecks, reefs, walls. Daily pick-ups from all hotels, 4 secluded waterside villas.

THIRD TURTLE INN 800/323-7600
Providenciales, Turks & Caicos Islands 312/655-5678
A small resort in a class by itself. PADI dive shop. 3 dive boats, group rates avail. gourmet dining, luxurious accomm.

UNDERWATER EXPLORERS SOCIETY—UNEXSO 809/373-1244
P.O. Box F-2433, Freeport, Bahamas (Use int'l airmail)
Famous facility, guided reef trips, instruction novice/advanced, group rates, 18' deep tank, chamber, air.

WALKER'S CAY HOTEL & MARINA, ABACO 800/327-3714
700 S.W. 34th St., Ft. Lauderdale, FL 33315 FL 800/432-2092
Undiscovered & unspoiled! Virgin reefs, spectacular caves.
Dive shop, boats, rental equipment, certification, great packages!

BARBADOS

DIVE BOAT SAFARI 809/427-4350 809/429-8216
@ Hilton International Barbados, Barbados, W.I. Tlx: WB 2272
Diving school, PADI certification, reef, wreck, night dive, air, shop. For reservation US-Can. Toll free 800/635-9900 BNRS

SCUBA DIVE RENTALS RENTALS-809/426-6936
Barbados Hilton Hotel (Arcade) Amer. Ex., Visa, M/C
Air & rentals, 7 days a week, year round, Sherwood sales & service.
e.g.: Comp. equip. set, 24 hrs. \$25 US; additional fill \$2 US.

THE DIVE SHOP LTD. 809/426-9947
P.O. Box 44-B, St. Michael, Barbados, W.I. 809/426-2031
Daily dive trips, dive packages with accommodation, from \$299 up.

BELIZE

AMBERGRIS LODGE US 816/361-2345
Ambergris Caye, Belize Lodge 011-501/026-2057
Caribbean Sampler. 4 days-3 nights full A.P. w/airport transfers. \$178 p.p. dbl. occ., group rates, fishing or divg. options.

GALLOW'S POINT CAYE US 801/350-8779
9 Regent St. W., Belize City, Belize, C.A. BZ 011-501-3054
Created by divers for divers.
Clean, comfortable rooms, restaurant, ocean front bar.

SAINT GEORGE'S LODGE, Box 625, Belize City 011-501-02-44190
"Rustic, secluded" Harpers. TX 214/341-5577; 800/631-0032
"Surpasses Cayman" Undercurrent. CA 714/955-2774; 800/854-9303
"For divers, the place to stay in Belize." Esquire. NAUI instruction.

VILLA AVENTURA — A DIVER'S VILLAGE AT CAYE CAULKER
P.O. Box 2664, Evergreen, CO 80439 303/674-9615
Complete dive services and accommodations for groups and individuals. 800/538-6802

BRITISH VIRGIN ISLANDS

DIVE BVI LTD. 809/495-5513
P.O. Box 1040, Virgin Gorda, British Virgin Islands
J.T. Giacinto NAUI #3491, PADI #6773. Instruction, rentals, air, tours, wreck's dive packages available.

KILBRIDE UNDERWATER TOURS 809/494-2746
P.O. Box 40, Virgin Gorda, British Virgin Islands
Daily dive tours, wrecks of Anegada, tank fills.
Bert, Jim & Gary Kilbride. PADI instruction.

UNDERWATER SAFARIS 809/494-3235
P.O. Box 139, Tortola, BVI 800/535-7289
Rhône & reef dives daily. PADI training facility, sales, rental, photo center, hotel dive/sail packages. 809/494-3965

CARIBBEAN

AQUARIUM DIVE RESORT (811)6649 or 6378
P.O. Box 1692, San Andres Isla, Colombia Tlx: 40126
Guided U/W tours, air, rentals, instruction.
PADI, CMAS, FEDECAS. Pablo Montoya, Diving Operator.

BASKIN-IN-THE-SUN 800/323-3415
IL 312/952-1414; P.O. Box 851, Port-au-Prince, Haiti, tel: 2-6530
Alan Baskin at Kaliko Beach Hotel, PADI training facility, 50 ft.
Cat w/sun deck, 4 instr., pers. attn. & you never carry your gear.

DIVE ANTIGUA 813/371-3196
All inclusive travel/diving packages exclusively through Scuba Trips, P.O. Box 5503, Sarasota, FL 34277
NAUI certification available.

CAYMAN ISLANDS

BOB SOTO'S DIVING, LTD.—SCUBA CENTRE 800/262-7686
Airmail: P.O. Box 1801, Grand Cayman, BWI
AM, PM, North Wall & night dives. Individual & group personalized packages, SCUBA/photo rentals & complete training programs.

BRAC REEF BEACH RESORT, CAYMAN BRAC 800/233-8880
Brac Aquatics, Ltd. 800/327-3835
5920 Rodman St., Hollywood, FL 33023
3 tank dives, Little Cayman trips.

CAYMAN ISLANDER HOTEL—GRAND CAYMAN 800/233-8880
Bob Soto's Diving Ltd. 800/327-3835
5920 Rodman St., Hollywood, FL 33023
Wall, reefs and wreck diving package available.

Ron Kipp's CAYMAN DIVING LODGE 800/262-7686
P.O. Box 11 East End, Grand Cayman, BWI
Cayman's 1st toll free number provides instant information & reservations for great wilderness, wall, reef & wreck diving.

SAM MCCOY'S DIVING & FISHING LODGE—Little Cayman
located on North shore, fully A/C rooms, 3 meals daily—\$120/day.
Virgin reefs, wrecks & finest shelf divg. in world. Over 40 yrs. exp.
CI 809/948-8326; US 412/834-4064-div; 412/353-2986-nite/wknds.

SCUBA SAFARI—Private Diving Tailored To You! 809/949-3742
P.O. Box 2029, Grand Cayman, BWI. Tekna's new DPVs—10 times further on 1/2 the air! Jeff's guest home—\$500/wk. (diving disc.). 5 yr. wkly. timeshare—\$300/wk! Free trip to purchaser.

COSTA RICA

PHANTOM ISLE LODGE 713/489-9156
P.O. Box 559, Marvel, TX 77578
Jungle lodge, only Pacific reefs and Cano Island.
Pirate wrecks, group rates, fish, lobster, No crowds!!

FAR PACIFIC

ANILAO SEASPORTS CENTRE RESORT 801-1850
16 Evangelista St., B.F. Homes, Paranaque, Mla., Philippines
Diving Batangas area, complete facilities inc. sailing.
Packages available, PADI instruction. Tlx: 63099 ANLAO PN

BERNARD & COMPANY
P.O. Box 79171, Mongkok Post Office, Kowloon, Hong Kong
Casio, Puma diver's & scientific watches. Other brands available. Cheap!! Send \$2 for catalogue/price.

DIVE CENTER PHILIPPINES, INC. Ph: 86-31-94 or 87-36-46
2172-B Pasong Tamo St., Makati, Metro Manila, Philippines
PADI/NAUI instr., sales, rental, air, repair station, custom & ready-to-wear wetsuits, tours to Bonito Island Resort.

MAK'S DIVING OF JAPAN 052-211-7772
2-18-34 Nishiki, Naka, Nagoya 460, Japan
Full service diving system, U/W photo specialist.
PADI training facility. Pool/shop.

SEA TOPIA PRO DIVING CENTER, INC. 09889-2-5567
593 Isa, Ginowan City, Okinawa, Japan
Custom made wet suits, PADI instruction.
Sales, repair, 3000 PSI air station, indoor pool.

HONDURAS

ANTHONY'S KEY RESORT-ROATAN 305/858-DIVE; 800/227-DIVE
Exec. Offices: 1385 Coral Way, Ste. 302, Miami, FL 33145
Unlimited dive packages, excellent deep or shallow diving.
Water sports, fishing, tennis.

BAY ISLANDS DIVE RESORTS 800/328-0734
Go Diving: 715 Florida Ave. S. Minneapolis, MN 55426
Dive packages to resorts in Roatan and Guanaja.
Barrier reefs, walls, snorkeling, windsurfing, sailing.

COCO VIEW RESORT—ROATAN 800/282-8932
1713 Pasco Rd., Wesley Chapel, FL 34249 813/973-0651
\$499/7 nights. Unlimited wall diving guaranteed 365 days a year! All meals. Live aboard dive boat now available.

DIVE PLUS—CSY DIVE/SAIL—ROATAN 800/237-1131
5936 Benjamin Rd., Tampa, FL 33614 813/886-6783
Hotel and/or yacht based unlimited spectacular diving.
No cattleboats here, sail-free use outrubrs. windsfg., pool.

REEF HOUSE RESORT—ROATAN, HONDURAS
P.O. Box 640399, Kenner, LA 70064 Toll free 800/341-1950 ext. 73
Built on top of reef, intimately accom. up to 30, excellent food.
7 days, meals, unltid. diving, fishing, boats, guides: \$499.

ROATAN ISLAND-BEACH HOUSE RENTAL 906/863-3618
Marsha Andrews, Rt. 1, Box 320, Menominee, MI 49858
Near Anthony's Key Resort. 2 BR, dix., maid, private bch., scuba, snorkel, 4 persons, \$450/wk. Brochure, rsns. Video avail.

ROATAN LODGE RESORT 800/231-6560
U.S. Office: P.O. Box 27342, San Diego, CA 92128 619/487-7657
Personalized diving retreat, barrier reef, historic Port Royal Harbor, gourmet delights, windsurfing; sailing.

INDIAN OCEAN

BALI-HOTEL BUALU NUSA DUA (HOTEL CLUB) (0361)71310
P.O. Box 217, Denpasar, Bali, Indonesia Tlx 35231 BUALU ND
1st class resort. PADI instr., dive boat, shop, dive tours Bali
All sport free o.c. Tennis, horses, windsurf, sail, bicycles.

JAMAICA

CLUB CARIBBEAN/SUNDIVERS 809/973-3507 800/221-4588
P.O. Box 65, Runaway Bay, Jamaica, West Indies
Hotel cottages in Runaway Bay, Jamaica's finest diving, beach free skiing, windsurfing, sailing, snorkeling, glassbottom boat.

NEGRIL SCUBA CENTRE 809/957-4323
Negril Beach Club, Negril, Jamaica
Beginner lessons, dive packages, certification, photography.
Beautiful, exciting dives daily with PADI instructors.

SUNDIVERS, JAMAICA LTD. 809/973-2346
P.O. Box 212, Runaway Bay, Jamaica, West Indies
Jamaica's 1st & only 5-Star PADI int'l training facility.
Extensive sls. & svs., camera rentals, resort dive pkgs.

MEDITERRANEAN

CYDIVE CYPRUS 061-34271
1, Poseidon Ave., Kato Paphos, Cyprus
Full range PADI & BSAC courses. Dive trips & hire.
Gear sales v. competitive with European prices.

DIVEWISE SERVICES, LTD. 36441
Dragonara Water Sport Centre, St. Julians, Malta
The friendly dive company. Reliable and personalized. CMAS & PADI.
Full beach club facility, sailing, windsurfing, etc.

MEXICO

AA1 SCUBA CANCUN 988/4-23-36 & 3-10-11
P.O. Box 517, Cancun, Quintana Roo., Mexico 77500
Ex com. & military diver owner 30+ yrs. divg. exp. NAUI, CMAS, PADI Master instr. Tours, classes, referrals, PADI int'l training facility.

AQUA TOURS 988/3-0227
P.O. Box 528, Cancun, Q. Roo, Mexico 77500 988/3-1137
Dive the Yucatan Reefs, daily trips to I. Mujeres Bay and Cozumel. Instruction, rentals, package and group rates.

BAJA EXPEDITIONS, INC. 619/297-0506
P.O. Box 3725, San Diego, CA 92103
Dive the Sea of Cortez, Baja, CA, Mexico. Unlimited diving aboard the 80' "Don Jose". Single and group reservations.

CASA DEL MAR DE ZIHUATANEJO (743) 4-21-19
Paseo del Pescador #20 Local 6 Zihuatanejo, Gro.
Dive the Pacific in Ixtapa Zihuatanejo. Full divg. svs. Cert. instr., U/W photo., snorkeling, SCUBA lessons, air, mtl., spec. trips.

CEDAM DIVE CENTER US 713/484-8420
Aventuras Akumal PADI Training Facility 5737
Mike and Kathy Madden/Y.D.A., Box 1341, Cancun QR, Mexico
Daily reef dives, PADI certifications and fun.

CLUB AKUMAL CARIBE HOTEL US 800/351-1622
P.O. Box 1976, El Paso, TX 79950 TX 915/584-3552
PADI certs., uncrowded diving, bilingual dive pkg. w/meals, hotel incl. from \$51.50/day/person, rentals, 60 miles south of Cancun.

CLUB AKUMAL CARIBE—PAUL BUSH founder—CEDAM International
Headquarters since 1958. Best diving in Mexican Caribbean, 5 min. to second largest Barrier Reef in the world. Kapaalua Dive Shop, hotel, real estate, condos, time sharing.

COZUMEL HOUSE FOR RENT 212/254-5623
Contact: Andy Zimmerman, 632 E. 14th St., New York, NY 10009
Furnished 2BR, 2BA house in town, sleeps 6. Maid service & kitchen. Also dive packages & certification & car rental.

DISCOVER COZUMEL DIVE SHOPS
P.O. Box 75, Isla de Cozumel, Q. Roo, Mexico
Daily scuba trips to Palancar Reefs. Resort courses.
Rentals/group packages. Ernesto Vera Kentzler, owner.

DIVE PARADISE COZUMEL (987) 2-10-07
Personal service like you never dreamed possible in Mexico.
For a wealth of free information call US office 206/441-3483 or write: P.O. Box 222, Cozumel, Q. Roo, Mexico 77600.

DIVERS PARADISE: CLUB AKUMAL CARIBE. Furnished bungalow, 20' from beach, sleeps 6, daily maid service.
Available Dec. 15 thru Dec. 29th, 14 days \$1200.00
Sale also possible. 312/438-8420

EXCURSIONES AKUMAL.
Dick Blanchard, Postal 1345, Cancun, Q.R. Mexico
PADI cert. course, 3 days includes: diving & equipment, \$200.
English or Spanish. Open water & individual courses offered.

EXCURSIONES AKUMAL. Uncrowded Akumal So. of Cancun
10 minutes to the world's 2nd longest barrier reef.
Fully equipped shop: rental, instruction, dive trips.
Bilingual staff. 12 years on the Mexican Caribbean.

GALAPAGO INN/SCUBA COZUMEL (987) 20663/20627
P.O. Box 289, Cozumel, Q. Roo, Mexico 77600
Beach front dive resort, compl. facilities with a professional staff. 10 years experience catering to the serious diver.

GUAYMAS-SAN CARLOS US 602/840-7259
Beautiful area 250 miles south of U.S. on the Sea of Cortez with outstanding concentration of marine life. New full-complement dive boat 'Bravo'.

HOUSE FOR RENT-COZUMEL 303/442-0258
Rex Walker, 3100 Airport Road, Boulder, CO 80301
3 bedrooms, completely furnished, maid.
Weekly rates, scuba guide, near beach.

LA CASA DEL MAR S.A. 5-43-92-18
Amores 719-B, Col. del Valle, Mexico 03100 D.F. 6-87-07-93
Trips to Tarzan River, submersed colonial town in Tequesquitengo Lake & volcano Xinantecatl, 14,000' alt. Air, sls., rntl.

LORETO DIVERS Ph. (683) 3 00 29
Salvatierra 47 Loreto, Baja California Sur Mexico
Guided scuba & snorkel tours, instr. Full equip. rental & sales. Air 3000 psi. Dive beautiful secluded islands.

MARISLA II, LA PAZ B.C. 619/755-0375
13035 Via Grimaldi, Del Mar, CA 92014
Luxury diving in the Sea of Cortez (see Jan. '84 Undercurrent).
Unlimited diving aboard 121' ship, 8 dbl. staterooms, xint. food.

MULEGE DIVERS
Madero #45, Mulege, Baja Calif. Sur, Mexico
Guided underwater tours, air, service, equipment rental and sales, PADI certification classes.

NATURE STUDY CENTER 415/321-0123
Las Gatas Beach, AP 81, Zihuatanejo, GRO. 011-52(743) 4-3532
Sun, seaports & seminars. Tropical bed & 2 meals, \$27.50. Boat dives \$25. Tlx: 16220

U.S.A. WHOLESALERS & REPS
Lowest cost dive packages. La Ceiba, La Perla, Villablanca, Galapago-inn & La Plaza hotels. Lowest airfares. 10 yrs. Cozumel exp. Full-time Cozumel on-site rep. USA office (206) 441-3483.

MICRONESIA

MICRONESIA AQUATICS OF TRUK LAGOON
P.O. Box 57, Truk Lagoon, E. Caroline Islands 96942
Individual & group tours arranged. Professional guides for diving & U/W photography. Complete dive services.

MICRONESIAN YACHTS CO., LTD. (670) 6830/6843; Tlx: 783630
P.O. Box 949, Saipan, CM 96950 Ansback: ABOGADOS MN
Dive & sail remote & uninhabited islands of Micronesia incl., Palau, Northern Marianas on maxi racing schooner 'New World'.

THE VILLAGE Telex: (RCA)729-6803
P.O. Box 339, Ponape, Caroline Islands 96941
Resort hotel, restaurant, tours, spectacular diving, private thatch bungalows with waterbeds, fabulous foods.

TRUK SCUBA DIVE CENTER (TSDC)
c/o Hans Willander, P.O. Box 747, Moen Truk, E.C. Is. 96942
or Chris Woodward, 98-920-C Noelani St., Pearl City, HI 96782
Complete dive center, tours, boats, guides, equipment.

U.S.A. WHOLESALERS & REPS
Custom packages to Truk, Palau & Ponape to fit your personal needs. Indiv. & group packages. We handle air, hotels, diving, transfers, etc. Phone USA stateside office at (206) 441-3483.

NETHERLANDS ANTILLES

BONAIRE-BACHELOR'S BEACH APARTMENTS 202/244-5046
c/o 2805 Battery Pl. N.W., Washington, D.C. 20016
Dive the Caribbean the relaxed and inexpensive way from your own patio & pier. Luxury furnished 1 & 2 a/c BR on the water.

BONAIRE BEACH BUNGALOWS 717/586-9230
P.O. Box 264, Waverly, PA 18471
Luxurious 2 BR villas, A/C, kit., fully equipped, diving, 3 min. from downtown, 15 feet from ocean, total privacy, reasonable rates.

BRUCE BOWKER'S CARIB INN 011-599-7-8819
P.O. Box 68, Bonaire, Netherlands Antilles
Largest selection of sites, spacious rms., ocean view, A/C & pool, reef trips, air, sales, rentals, no crowded reefs.

CORAL VILLAS 011-599-7-8428
Belnem, Bonaire, Netherlands Antilles
Modern seaside fully furnished A/C 1 bedroom apts.
Kitchen, 2 pers. acc. ea. for all year round rate of \$30 p/d.

DIVE FROM YOUR DOORSTEP. Beautiful seaside home in Bonaire, 4 bedrooms, AC, \$650/wk. 8 persons.
Contact: Sue Carrion, 413/592-7751, 413/533-6228
31C Hillcrest Park, S. Hadley, MA 01075

SEA SABA DIVE CENTER US 212/966-1902
Windwardside, Saba, Netherlands Antilles 011-599-4-2246
PADI instruction, package rates with comfortable & friendly inns.
Marine biologist available for groups, large variety of dive sites.

SOROBON BEACH RESORT/CLOTHES OPTIONAL 599-7-8080
P.O. Box 14, Bonaire, Netherlands Antilles Tlx: 1200 inpo
Housekeeping cottages on private nude beach, shop, restaurant.
Studios, one-bedroom units, dive packages. Ask brochure.

TOUCH THE SEA with DEE SCARR 011-599-7-8529
c/o Touch the Sea, Box 40, Bonaire Netherlands Antilles
Personalized dive guiding: marine creatures, photos, much more.
Reservations appreciated. (Closed October)

NEW ZEALAND

PAIHIA DIVE, HIRE & CHARTER (0885) 27551
P.O. Box 210, Paihia, Bay of Islands, New Zealand
Pro dive store, rentals, sales, service, PADI instruction, boat charters. Single or group bookings.

PAPUA NEW GUINEA

JAIS ABEN RESORT PTY. LTD. 82-3311
P.O. Box 105, Madang, Papua New Guinea Tlx: NE82716
Dive coral reefs & WW II wrecks within 15 min. of resort.
Complete packages, 3 boat dives daily, NAUI facility.

RABAU DIVE & TOUR SERVICES 922913
Box 1128, Rabaul, Papua New Guinea 927145
Wreck diving specialists, tours, instruction, rentals & dive packages. Tlx: 92982

TROPICAL DIVING ADVENTURES PTY. LTD. 257429
P.O. Box 1644, Boroko, Papua New Guinea 251716
NAUI pro facility, still & video photography, tours.
Charter vessel, Papua New Guinea's sport diving specialists.

PUERTO RICO

CARIBBEAN SCHOOL OF AQUATICS, INC. Since 1963
Captain Greg Korwek 809/728-6606
One Taft St., Suite 10-F, San Juan, PR 00911 809/723-4740
Best boat diving, scuba instruction, sailing charters.

CARIBE AQUATIC ADVENTURES 809/721-0303 ext. 3447
Caribe Hilton Int'l, P.O. Box 1872, San Juan, Puerto Rico 00903
Best reef divg. in San Juan. NAUI & PADI instr., sales. Enclosed reef & cave dive areas (right at hotel). 4 dives daily.

VIEQUES DIVERS 809/741-8600
P.O. Box 1001, Vieques, Puerto Rico 00765
PADI training facility, windsurfing, remote island located half way between San Juan & St. Thomas.

RED SEA

AQUASPORT INT'L RED SEA DIVING CENTRE LTD. 059-72788
Coral Beach, P.O. Box 300, Eilat, Israel 88102 Tlx: 7710 AQUASIL
Dive & windsurf the Red Sea, 7 days incl. B.B. from \$140.
PADI 5 star facil., resort, & adv. instr. Sinai cruises, safaris.

LADY JENNY V 404/482-7661 Tlx: 810-766-4460
Red Sea Adventures In 4th yr. of continuous operations from Sharm El Sheikh. 32 departures/year w/AC comfort. Unlimited diving, biggest selection of dive sites on offer, British crew.

LUCKY DIVERS Tel. 059-75749
Moriah Hotel, Eilat, 88000, Israel Tlx: 7775
Dive the Red Sea to Rash Muhammed on luxury yacht 'Suellin' 78'. Hotel package & 2 dives \$44 per day.

RED SEA DIVERS, SHARM EL SHEIKH Tel: 770200-770301
32 Sabry Abu Alam St., Cairo, Egypt Telex: 94002 OHTEG UN
Diving, E6 Lab, windsurf, restaurant, desert trip (including lunch), glass bottom boat, etc.

SOUTH PACIFIC

CORALHEAD DIVING P.O. Box 211, Nuku 'alofa, Tonga Ph. 22176
150 islands, day dives on the 27' 110hp 'African Queen'.
Excitement? Try 17' 55hp Lancer 'White Knuckles'. PADI training facil. USD auth. dealer. Full dive shop, rentals.

FUJI ISLANDS DIVE TAVEUNI
170 Denny Way, Seattle, WA 98109 206/441-3483
U.S. office for Fiji Diving. Taveuni, Gumea, Mana, Scubahire.
Groups/individuals, monthly departures.

OCEAN VOYAGES 415/332-4681
1709 Bridgeway, Sausalito, CA 94965. Explore Galapagos underwater! Also Cocos, BVI, Tahiti, Philippines.
For groups 4, 6, 10 or individuals.

SCUBAHIRE & SCUBAHOLIDAYS
G.P.O. Box 777, Suva, Fiji Islands
8 days/7 nights package from \$260 incl. 5 days diving.
PADI training facility, extended charters, gear sales.

TAHITI AQUATIQUE, B.P. 6008, Faaa, Tahiti Ph. 428042
Dive with Dick Johnson, an American Marine Ext. 0951
Biologist. NAUI, PADI, FFESSM & CMAS intl. instr.: tour pkgs., using US equip. with surprisingly good diving.

THAILAND

DAVE'S DIVERS DEN-NAUI Pro Facilities 258-3662 or 419387
44/1 Soi Asoko, Bangkok, 10110, Thailand-Also Pattaya
NAUI, PADI, YMCA professionals. NAUI specialty courses, DM & ITC full service centers, sales, service, rental, tours.

PHUKET DIVERS CO., LTD. Tel. (076) 215-7398
7/70 Poonporn Rd., Phuket 83000, Thailand
Camping, snorkeling, scuba, diving (U.S. Diver equip.), rentals, sailing trips to Phipi & Similan Island.

SANTANA INT'L DIVING CENTER, PATONG-BEACH, PHUKET
P.O. Box 79, 83 Phuket, Thailand
Daily boat excursion & safaris by 50' sailing yacht.
Rental, air, hotel rms. Compl. tour & dive svcs. Write now.

SEAFARI-largest dive cntr. in S.E.A.'s major resort 038/419060
Pattaya Beach Resort, Thailand Cable: ROGADEN tlc:85909 TH
PADI 5 Star Instr. Devl Center/All level certs/5 specs, 1st aid/CPR
Tropical/wreck dives. Pro sls,svcs,rntl,pure air,windsurf,resort accom.

U.S. VIRGIN ISLANDS

AQUA ACTION 809/775-6285
P.O. Box 12138, Charlotte Amalie, St. Thomas, USVI 00801
Scuba, instruction, snorkeling, windsurf, tours with personality.
Rhône trips. Equipment rentals, sales and service.

CARIBBEAN SEA ADVENTURES, INC. 809/773-6011
P.O. Box 3015, Christiansted, St. Croix, USVI 00820
Complete dive shop, daily tours to St. Croix's best sites aboard 40' custom dive boat Deliverance. 809/773-5922

CHARTE HOUSE HOTEL 809/773-1377
2 Company St., C'sted, St. Croix, USVI 00820
Specializing in dive packages, economical, convenient.
Restored historical hotel with pool, AC. Send for brochures.

CHRIS SAWYER DIVING CENTER 809/775-7320
41-6-1 Estate Frydenhoj, St. Thomas, USVI 00802
Full svcs. NAUI pro facility, personal svcs. quality guaranteed, cruise ship pick-up at dock. Send for VI diving info packet.

DIVE EXPERIENCE, INC. 809/773-3307
P.O. Box 4254, Christiansted, St. Croix, USVI 00820
40' dive boat, wall dives! Night dives. 24 hour number.
Hotel packages. Introductory dives-PADI, NAUI, SSI.

JOE VOGEL DIVING CO.-EX-UDT Center: 809/775-7610
P.O. Box 7322, St. Thomas, USVI 00801
Oldest cert'd diving school in USVI. Joe conducts all scuba instr., day, night, wreck dives & snorkel tours. U/W photo. Pers. service.

SEA ADVENTURES 800/524-2096
P.O. Box 9531, St. Thomas, USVI 00801
Dive with the fun professionals! PADI, NAUI affiliated.
Daily scuba, sailing & land tours. Call for free info!

SEA SHADOWS SCUBA 809/778-3850
P.O. Box 505, Cane Bay, St. Croix 00820
Full service center @ Cane Bay. Air, rentals, sales, instruction & tours of spectacular drop-off walls of the north shore.

UNDERWATER SAFARIS OF ST. THOMAS 809/774-1350
Yacht Haven Marina, P.O. Box 8469, St. Thomas, USVI 00801
Sail & dive packages, daily & weekly rates, rentals.
Scuba instruction, tours daily, reef & wreck dives, hotel pkgs.

V.I. DIVERS LTD. 809/773-6045
Pan Am Pavilion, Christiansted, St. Croix, USVI 00820
NAUI, PADI training facility, all services & tours.
44' custom dive boat. Largest St. Croix operation since 1971.

V.I. DIVING SCHOOLS/SUPPLIES, INC. 809/774-8687
P.O. Box 9707, St. Thomas, USVI 00801-3400 809/774-7368
Sales, tours, classes, rentals, repairs, air.
SSI, NAUI, PADI, YMCA, IDEA: skin diver thru instructor.

WESTWARD ISLANDS

ANSE CHASTANET SCUBA ST. LUCIA 800/328-5285
P.O. Box 216, Soufriere, St. Lucia, West Indies Telex: 0398/6370
Dive packages, accom., bars, restaurant, snorkel, resort courses, air, rental. Complimentary windsurf, sail, tennis. 809/454-7354/5

DIVE ST. VINCENT 809/458-4714
P.O. Box 864, St. Vincent, West Indies
Custom diving with the personal touch. Dive Bill & Bob in St. Vincent & the Grenadines. 2 full service shops.

ATTENTION DIVE STORES
call **800/231-4053**

in CA 213/854-2700

Expose yourself in the DIVER'S DIRECTORY!
Call us for more info on profitable
advertising in this section.

DELUXE Seachute

JACKETS in
exciting
new

divecolors



This is Dacor's top-of-the-line BC, the one that set the standard for comfort, fit and performance. Now we are offering it in the color combinations that tie in with the entire "divecolors" line, including wet suits, masks and snorkels. Now you can dive in style and still have all the features you've ever wanted in a BC.

The Dacor BXD and BCW have complete wraparound support with continuous air chambers front and back for balanced trim. Front panels extend further back under the arms for additional comfort when inflated.

We've added a revolutionary adjustable

compensating band that threads through the waist band slots and fastens with Velcro® that, when combined with the adjustable straps on each side panel, gives the diver a perfect fit and secures the jacket.

Other features include four quick-drain mesh bottom panels; covered drain plug; two large D rings; two large Velcro® sealed pockets; and Velcro® retainers for alternate air source, gauges, and hoses.

Be ready for style and performance on your next dive. Try the DELUXE SEACHUTE, the vest that's best—at your Dacor Dealer.



DACOR CORPORATION
161 Northfield Road
Northfield, IL 60093
Phone (312) 446-9555

circle #242 on Reader Service Card

The first BC to compensate for comfort.

Introducing the new JMC BC. A lot of BC's compensate for buoyancy. But put a tank on them, take a few steps, and you'll soon realize that any claims of comfort are highly inflated.

The new JMC BC is quite the exception. It's the only one designed from the ground up for comfort.

Try one on—with a tank—then walk around. Its Alpine-type integral Bac Pac transfers all the tank's weight from your shoulders to your hips. You're no longer a beast of burden (in or out of the water). Now do a few wide open arm circles. Notice the arm freedom. No straight jacket restrictions. Just effortless movement in every direction.

Our unique design also lifts you higher above the waves for even more comfort and visibility.

The JMC BC incorporates quite a number of other unique features some BC's may offer in the future. But we think it will be awhile. You see, the JMC BC features everything we've learned about buoyancy control (and comfort) in the last 30 years of diving.

Want more information? Contact your authorized Aqua-Lung Pro-Line dealer or U.S. DIVERS, 3323 W. Warner, P.O. Box 25018, Santa Ana, CA 92799-5018, or call (714) 540-8010. Experience the first BC to compensate for comfort.

An overpressure safety relief valve automatically expels all air over 2 lbs. above ambient. It comes with a manual pull dump for precise buoyancy control.

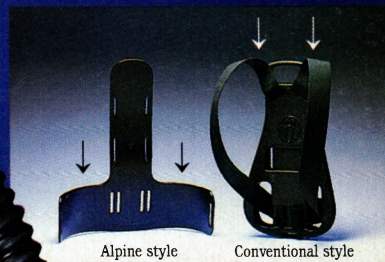


You float higher above the water's surface for better visibility and surface comfort.



The streamlined low-profile design hugs your body like no other BC can. You also get the best internal bladder design in the United States: a compartmentalized system that not only eliminates bulkiness, but UV and ozone deterioration. Even punctures caused by salt crystals.

Our two large, self-draining Lycra Spandex utility pockets feature Velcro® hold downs and are slanted to hold our Octopus regulator. And no more D-rings to fiddle with. Our unique dual-size adjustment fasteners ensure a comfortable fit without the fuss.



The built-in Alpine style Bac Pac transfers tank weight from the shoulders to the hips for unsurpassed comfort.

Inflation and precise buoyancy control are effortless with our unique, easy-to-use inflation system.

Nobody makes a tougher outer bag than U.S. Divers. Made of durable nylon, it resists punctures, time after time. And it features a tank carrying harness for ease of handling.



We've applied for a patent on this one: our unique Sea Band cummerbund. Once set on the surface, it automatically compensates for the compression of your wet suit throughout your dive. No more needless adjustments.

The new JM Cousteau BC from

U.S. DIVERS®